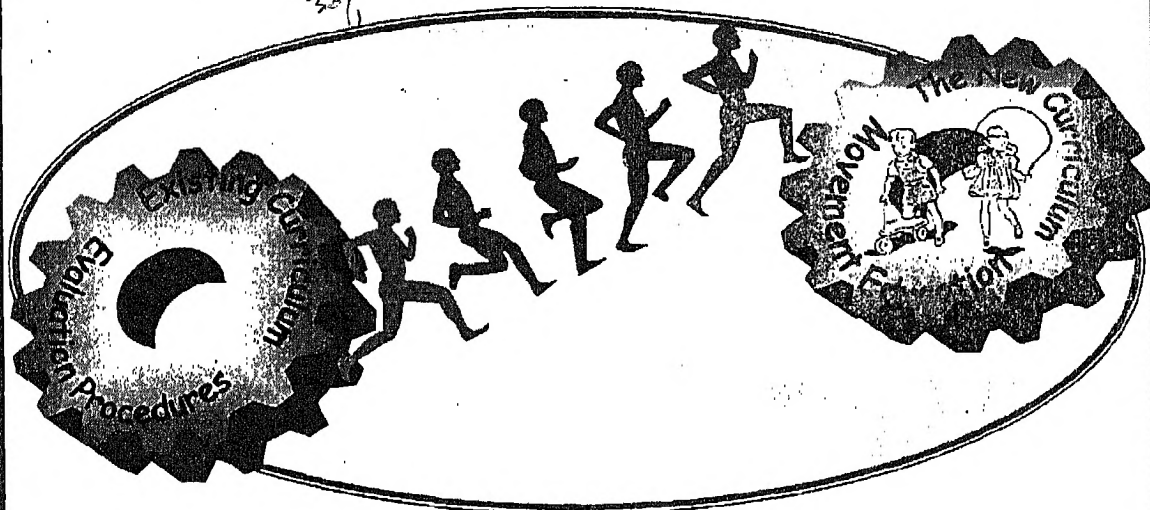


REPORT OF RESEARCH PROJECT
**PHYSICAL EDUCATION CURRICULUM
AT LOWER PRIMARY STAGE
- AN EVALUATION**

Sponsored by
ERIC
NCERT, New Delhi



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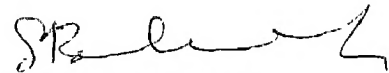
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ERIC FUNDED PROJECT

Report of the Project

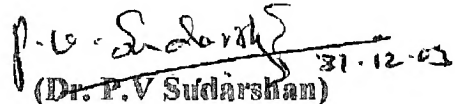
Physical Education Curriculum
at Lower Primary Stage
- An Evaluation

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Report of Research Project
Physical Education Curriculum at Lower Primary Stage
- An Evaluation

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Chapter - 1

Introduction

- 1.1 The Background of the Study
- 1.2 Statement of the Problem
- 1.3 The Objectives
- 1.4 Meaning of Terms
- 1.5 Limitation and De-limitation

1.1 The Background of the Study

Physical Education has had multiplicity of divergent meanings, and it seems least certain even today that a consensus of all experts can be formed. Hence an attempt to find an adequate meaning for Physical Education must be accompanied with a close tracking on the trends in Physical Education.

Certain trends in Physical Education have emerged since the past few decades, in response to the changing circumstances. The parameters of aims of Physical Education have varied with advent of new trends, regarding what Physical Education can do for an individual and for the society.

Physical Educationists, parents and classroom teachers often say that the purpose of Physical Education is to provide recreation and relaxation to students or 'the children need to have a change and be out of classrooms' or 'children need to let off steam', etc., these sayings remained accepted half a century earlier. During 1950s and 60s, other important aspects of Physical Education came to be identified and highlighted. The major aspect, which first came to be highlighted, was development of skills required for competitive games, based on biomechanical analysis. The Physiological and other mechanical factors influencing human movements were kept in view and competition oriented sports and games became the center of Physical Education with this trend, Physical Education of secondary and primary schools gained sufficient momentum. School athletics and games got unprecedented popularity. This trend made the society consider physical fitness and skill in sports and games as a valued social objective.

The analysis of physiological and mechanical factors influencing human movements, made more and more coaches of superior athletes, who were in search of excellence in performance, become concerned with concepts such as motivation, learning, perception, etc.

Lawrence in this forward to 'Psychology and physical activity' authored by Catty states "Physical educators and coaches were not ready in 1928 to think of themselves, their students, or their subject matter as illuminated in any fruitful way by the work of behavioral scientists..... teachers and coaches are now (1968) quite ready to look to behavioral science for guidelines that increase the probability of making effective professional decisions and that enrich their repertoire of alternative pedagogical strategies".

Further he stated

"However tentative and unsatisfactory we may find the present links between behavioral science and professional practice, there is no alternative to the business of constructing those links."

Skill development and competition centered physical education found during 50's and 60's gave rise to a new unfortunate situation in 70's and 80's, which is reflected in the works of Leonard.

"Many of the boys and a clear majority of the girls are simply confirmed in their inaptitude, turned away from the potentialities of their own bodies".

This condition is the result of shift in the focus of Physical Education. Prof. Marta Busch of institute of superior de- education Fisica, Uraguay,

has stated, in paper presented at a special session of International Olympic Academy during 22 to 28 July 1986, as follows,

"We have daily proofs that physical Education teachers graduate from institutes of higher education, throw aside their educational orientation and substitute for it the role of sports instructor, doing this under the influence if the search for excellence. This change of focus motivated by the search for excellence creates dangerous situations when applied to children and adolescents, without a pedagogical basis".

This criticism on the trends of Physical education was widely accepted and upheld by experts throughout the world. As a reaction to this, during the late 80's and the early 90's we notice another trend emerging out in Physical Education to assume an educational role especially in the primary and secondary school curriculum.

Logsdon stated,

"You will require, expect, and obligate Physical Education to assume an effective, un-mitigating education role in the elementary school curriculum".

Kane identifies that,

"Physical Education began to be interpreted and defined as an applied from of movement knowledge concerned with the organization of appropriate learning experiences for the education curriculum".

Kruger considers Movement Education as an individualized program, which can be within the framework of traditional Physical Education.

He states

"During the past twenty years there has been an upsurge and proliferation of programs that may in part, be considered a trend away from the rigidity of the conventional games dominated program towards individualized program featuring exploration of movement possibilities. Either a classroom teacher or a Physical Education specialist may teach movement exploration. Scattered formations are used, and each child is expected to explore the possibilities for movement either within his or her space, or in the general space without collision or in relationship to some pieces of apparatus or manipulative equipments".

Further Kruger adds,

"Movement Education rather than merely movement exploration represents a considerable step forward in the conceptual orientation of Physical Education activities to the core of Basic Movement Education. A programme of Movement Education within the framework of traditional Physical Education activity requires that all activities for all children, the kindergartner and the upper grader, the typical and the atypical, be taught in a manner that relates the concepts and movements to a fundamental body of knowledge consisting of movement principles, a movement vocabulary, and good body mechanics. A child who participates in movement education program continually grows in understanding of what the body can do, the underlying awareness, the concepts, the actions and the principles of movements and mechanics that govern and modify them".

Thus it can be identified that a trend emphasizing "Movement Education" with varied viewpoints has emerged during 90's.

To summarize, a birds eye view of different trends over the past 60 yearn in Physical Education makes it clear that during fifties and sixties, recess or supervised play Physical Education aiming at fun and recreation existed, and this gave way to organized conventional Physical Education aiming at development of skills of sports, games and physical fitness, required for excellence in competitions. During 80's and 90's a new trend in Physical Education under "Movement Education" started establishing as a discipline with its own legitimate goals in the field of education. The goals of Physical Education, emphasizes on preservation of efficiency of Movement in human beings, which specifically influence prevention degeneration of diseases, acquisition of desirable body image and development of kinesthetic appreciation. Before the advent of Movement Education, Physical Education was viewed only as having bounded to the broad views of education and also it was treated as just a tool to achieve the broad aims of education.

It is disheartening to record that Physical Education in schools in some parts of our country is still bound to only recreation and supervised sports and games. In the remaining other parts of out country Physical Education is still bound to search for excellence through competitions. In the view of the present trend of Movement Education found around the world, physical education throughout India needs to be reassessed on what it is doing to the school going children. The purpose and means of physical Education at various levels of schooling should be evaluated. With better understanding of the growth and development of children and commitment to improve the quality of life for everyone, we can redefine the aims and objectives of Physical Education and develop a new systematic program of Physical Education for the primary and secondary school children. The methods and means of Physical Education at various levels of schooling are

yet to be updated in our country. Physical Education should not be thought of as mere opportunity for releasing tension built up during the formal classroom setting or as an activity for developing physical fitness and skills of very few students selected for sports and games competition.

A change in the vision in Physical Education is required. The new vision could be, 'Developing the potential of all children for physical movements in all kinds of way from early age through a systematic, goal oriented physical education programme during pre-primary, lower-primary and higher-primary school levels'.

"Developing potential for movement in all school going children, is yet to catch attention and efforts of the committed teachers as an elaborate multidisciplinary study in our country. Rigorous academic study on teaching of movements, as manifested in skillful and expressive behaviour, has opened up a new area of study as "MOVEMENT EDUCATION".

"Movement Education has provided scope for innovation in activities of school children, scientific speculations and experimentations on information processing in motor learning, techniques of quantifying various motor aspects, new curricular design for school going children and many more such areas. This trend has given a new look to the different aspects of Physical Education for school children".

1.2 Statement of the Problem

The design of curriculum of Physical Education at primary school level has shortcomings. The shortcomings should be identified, confirmed and solutions should be found.

The areas of shortcomings located for the present research project are focused in the following two statements,

1. Objectives of physical Education for Lower Primary School level needs to be reassessed in the light of "Movement Education".
2. The existing course content of Physical Education and Evaluation procedures for Lower Primary School children needs to be reassessed in the light of Movement Education in Physical Education.

In the light of the above two statements the present Research Project is titled as

**"Physical Education Curriculum at Lower Primary Stage:
- An Evaluation"**

1.3 The Objectives

The following four objectives were set for the present study

1. To study the curriculum of Physical education followed in lower primary schools of Mysore District.
2. To study the Evaluation programs in Physical Education at Lower Primary Schools of Mysore district.

3. To study the different facets of Movement Education, and to prepare a curriculum, based on Movement Education for Lower Primary Schools.
4. To study the feasibility of the Physical Education curriculum based on the concepts of Movement Education for Lower Primary Schools.

To achieve the above objectives following questions are answered in the present research project.

Objective - 1

1. What is the attitude of Primary School Teachers towards Physical Education?
2. What are the existing Aims and Objectives of Physical Education for Primary School Level? (1st to 5th Std)
3. What is the existing content of the curriculum of Physical Education for Lower Primary School Level? (1st to 5th Std)
4. What are the activities of Physical Education thought in Lower Primary Schools of Mysore city?
5. What are the Infrastructure facilities available for Physical Education in Lower Primary Schools of Mysore city?

Objective - 2

1. What is the Evaluation procedure in Physical Education prescribed in Lower Primary Schools?
2. Is the prescribed Evaluation Procedure being followed in all the schools?

Objective - 3

1. What are the different Aims and Objectives of Movement Education?
2. What are the activities covered in Movement Education?
3. Which are the objectives of the Movement Education suitable to different age group of Lower Primary School children?
4. Which are the activities of the Movement Education suitable to different age group of Lower Primary School Children?
5. Which are the other evaluation procedures better than the existing evaluation procedures for Lower Primary School level Physical Education?
6. To prepare a curriculum for Std. I, II, III, IV and V of Lower Primary School based on the contents of Movement Education.

Objective - 4

1. Is the curriculum prepared as stated in 6 above, feasible for implementation?
2. What is the impact of new curriculum on the abilities of children?

Thus fifteen questions are answered to achieve four objectives in the present research project.

1.4 Meaning of Terms

Physical Education Curriculum: "Physical Education Curriculum" refers to the curriculum of Physical Education Curriculum approved by State Secondary/Board of Karnataka.

Lower Primary Stage: "Lower Primary Stage" Classes I to V of Karnataka Secondary Education Board.

Evaluation: "Evaluation" in the present study encompasses the assessment of present status, identification of shortcomings and proposing of remedies.

1.5 Limitations and De-Limitations

The study is limited to the existing Physical Education Curricular approved by State Secondary Education Board of Govt. of Karnataka and is de-limited to the schools of Mysore city.

Chapter - 2

Review of Related Literature

- 2.1 Historic Preview
- 2.2 The Present Scenario
- 2.3 Movement Education
- 2.4 Physical Education to Movement Education - A Shift

2.1 Historic Preview

The Status of Physical Education in Primary Education

(i) Constitutional Obligation

Today's children are the future India. The future of the nation as a whole is decided by the nature of education prevailing in the country. In our country every child is supposed to go through five years of Lower Primary Schooling, after the age of five years. This is to be continued by three years of higher primary Education. In connection with primary education, article 45 of Indian Constitution contains a directive principle that the states should strive to provide free and compulsory education for all children up to the age 14 years. This was to have been achieved by 1960. This directive principle remains unfulfilled. This is evident from the following lines found in a report from Ministry of Education, Government of India in 1966.

"In view of the immense difficulties involved, such as lack of adequate resources, tremendous increase in population resistance to the education of girls, large number of children of the backward classes, general poverty of the people and the illiteracy and apathy of parents, it was not possible to make adequate progress in primary education and the constitutional directive has remained unfulfilled."

Thus in 1996 it was accepted that "Primary education for all" has not been achieved. Strategies for fulfilling this constitutional directive were worked out and plans were drafted and implemented during 70's and 80's.

"In spite of the directive principles of the constitution to provide universal compulsory education up to the age of fourteen, it has eluded attainment. In view of the swelling number of illiterates, the target still remains difficult to attain. A reorientation in strategies and approaches has become the command of the time. This calls for serious introspection and connected efforts on several fronts".

In the context of National Policy of Education (NPE) - 1986 also, the Ministry of Human Resources and Development has accepted the non-fulfillment of the constitutional obligation to provide free and compulsory Education for all children up to the age of fourteen and strategies are suggested to fulfill this.

Many reports of recent commissions and committees (during 1995-2000) also confirm to the same views. Thus it remains very clear that the development in the quantitative aspects of education remains unfulfilled even to this day.

(ii) The Changing patterns in Physical Education

In any educational endeavor quantitative development has an end but qualitative development is a never-ending process. Keeping in view the quality of education we find a series of curriculum restructuring with varied visions during the past fifty years, along with suggestions for infrastructure developments.

The role of Physical Education in the general education of the child also underwent a series of changes in line with restructuring of curriculum.

Every time the curriculum of primary education was restructured, the task before Physical Educationists was "how best Physical Education can be effectively integrated into the pattern of our education system".

The secondary education commission of 1952 suggested measures for developing Physical Education for the youth at different stages of education. The All India Council of sports was setup in 1954 to suggest measures for development of sports. The first National Plan on Physical Education was prepared in 1956 and it emphasized the need for improving the condition of Physical Education through the Physical Educational institutions in the country. In 1959 the Kunzru Committee suggested measures for Co-Ordination of activities in the best interest of the students and youths. Thereafter in 1965, the Kothari commission recommended that health and Physical education should be one of the compulsory subjects of students up to 14 years of age.

Two national institutions for Physical Education and sports were established at Patiala and Gwalior to provide professional leadership in the field of Physical Education and sports. Some policy statements on Physical education, sports and games were issued by the central government in 1968 and again in 1975. The exhaustively drafted National sports policy was issued in 1980. During these years schemes such as national scholarships for talents, training for Physical Education teachers, etc, were implemented.

During pre-independence period physical education in Primary Schools was limited to teaching certain minor games, mass drill and marching practices. It was thought of as training in discipline and a means of relaxation from the tension built in classroom setting. Since the

independence of the country, various committees and commissions on education I general physical education in particular, have recommended that physical education should be a compulsory subject for all students at all stages of the school and proper evaluation techniques shall be employed to grade the students.

In national Policy on Education (1986), two very important suggestions were made, they are,

1. Integration of Physical Education and sports in learning process.
2. Evaluation of performances.

These two areas of Physical Education need immediate and very serious attention from all those concerned with primary education in our country.

Government of India has accepted in principle the importance of Physical Education at elementary level, while promulgation its sports policy in NPE 1986 and 1995 that, "Sports and Physical Education should be and integral part of the curriculum as a regular subject in schools and other similar educational Institutions. It shall be the responsibility of both the Central and State Governments to explore all avenues to reach the goal. As such hence forth special importance should be attached to Physical Education and sports at the elementary level".

Going through all changing patterns, Physical Education in schools today has reached an unfortunate pattern rooted in "Competition based sports and games" catering only to a "very few talented" in every school.

Chakroborthy states that,

"Movement Education is the right approach to serve the needs of the growing children and in fulfilling the objectives of Physical Education. The sooner the better it is to introduce this system of Physical Education in thousands of elementary schools throughout the length and breadth of the country for the betterment of Physical Education and sports policy in particular".

The aim of Physical Education at Primary School Level should be to provide Physical and Mental satisfaction through movements of various types, and creative physical activity. The most popular approach found in practice in many of the countries is movement - approach, which is termed as "Movement Education".

All these objectives can be attained through movement education approach. Movement Education approach is a dynamic and objective approach for programming Physical Education in primary Schools.

2.2 The Present Scenario

Physical Education in Karnataka has not identified it self with the present trends. It is remaining stuck to the trend of "training few children for competition" that existed in seventies and eighties. Because of this the curriculum and methods of Physical Education for primary grade children is found to have the many deficiencies. The following one few,

1. Physical Education is not treated in par with language, Arithmetic and Environmental Science, in the primary School Education.

Physical Education is placed under the areas of non-cognitive leanings.

2. MLL are not defined and prescribed in Physical Education, it is done so for languages, Arithmetic and Environmental studies.
3. The present programs of Physical education are under area other than cognitive area of learning and are found, attempting to develop many skills without developing basic movement abilities in primary school children.
4. The evaluation procedures to assess the leanings in Physical Education in the Lower Primary School children are not satisfactory.
5. Men and material infrastructure for Physical Education activities are insufficient in primary schools.

Change of Policies

To find remedies for above deficiencies a change in policies of Physical Education is urgently required. Along with finding remedies for the above five other two important points, which stress the need for change of policies, are,

- i. It is widely accepted that value education must be inbuilt in all the activities of a school. The role of Physical Education activities in developing proper set of values in school children has definitely and edge over all other activities provided in a school. But the physical education activities should be properly planned and implemented. It is reported by many, that competition centered activities made available for selected few children in schools, is creating value crisis among school going children. It is the right time to think of methods to over come such value crisis. A shift away from the competition-

centered physical Education can help in overcoming this crisis. This calls for a change of present policies in curricular design, methods and means of Physical Education.

- ii. Other than this, the rank of India in the Olympic medal tally is very disheartening. After every Olympics we blindly speak of talent search and training. Talent search is made among children of 12yrs of age up to the age of 12years 99% of Indian children are not exposed to guided Movement development activities. Without training children at grass root level, searching for talent will not bear good fruits. Movement education should become a mass movement in our country. Then only talent search will bear good fruits. A change in policy of curricular design can only bring out this.

2.3 Movement Education

There exists confusion in the role of Physical Education in the primary school education. Now it is time to define the objectives of Physical education with greater clarity for lower primary and higher primary stages. The objectives must keep in conformity with development needs of the child. This will have to be followed by a new curriculum design for lower primary and higher primary stages.

2.3.1 The Need

Movement Education provides a new direction in planning the curriculum for primary education at lower and higher primary levels. The type of Physical Education existing in Lower Primary level of our education system is supervised play and also conventional games and exercises.

These are mainly activity-centred programs. The rigidity of traditional supervised play and conventional games needs to be flexed by shifting the emphasis from activity to child. A child-centered programme is more than individualized program. Movement Education is a child-centered program. Hence there is a need for Movement Education at Primary Schools.

The rigidity of traditional program limits the task of teacher to make the child do things. It is important that teacher makes the child to "think" also. To make the child think freedom of choice must be given to him. Movement Education calls the teacher to give freedom of choice to children. Hence there is need of Movement Education in Primary Schools.

The present physical Education program mainly serves the athletic children only. Physical Education teachers teach children to manage their body in sports and game situations only and not in daily living situations. Life skills this trend needs an urgent shift. The shift should start from the primary education itself. Movement Education certainly caters to this and hence there is need of Movement Education in primary schools.

Child starts it's learning through movements from its infancy itself. Intellectual development is centered on movement developments. Hence education of movements should be fundamental in the school going children.

2.3.2 Objectives

Participation in games, relays and physical exercises etc., which are the major parts of existing Physical Education aims to develop self-discipline, independent thinking, co-operative living, perseverance etc., as

by-products. But these are developed as important supportive behaviors in a program of Movement Education. Hence there is need of Movement Education in primary schools.

Movement Education aims at development of awareness of body, space, effort and their relationships. The major objectives of Movement Education at primary school level are,

1. To develop movement vocabulary
2. To develop movement principles

Developing movement vocabulary is basically verbalizing movements, and developing movement principles includes many cognitive, affective and psychomotor objectives.

2.3.3 Content

The content employed under Movement Education are, assisting the child to develop skills in using his/her body in stretching, twisting, rolling, jumping, hanging, running, walking, hopping, catching, striking and a number of combinations of these movements that are within the capability of children of primary school. And also sports and games activities based on the above-mentioned skills.

2.3.4 Teaching and Evaluation

Experts involved in designing curriculum of physical Education must decide to consider Movement Education as the core in the Physical Education program for lower primary children. It is imperative that new means and methods of teaching and evaluation in the area of movements of

primary school children are to be evolved and adopted. More and more research in this area would definitely provide a wider base for a better vision towards the future of Movement Education at primary school level.

A good physical Education programme should have a programme of Movement Education for primary school children. The concept of Movement Education gives Physical Education at primary school stage "A New Look".

2.4 Physical Education to Movement Education - A Change

Movement Education has three interlocked areas of content. The first one is Basic Movement Education, the second is Developmental Movement Education and the third is Expressive Movement Education. Activities of Physical Education and Movement Education are basically the same. The difference is in the approach of choosing the activities and the method of teaching the activities and also the priority of cognitive and affective objectives over the motor objectives.

Activities brought under the three areas of Movement Education will provide the required material for restructuring curriculum of Physical Education for Primary School children, and can be named as "*Movement Education curriculum*". **This Change is required to create a new vision.**

Chapter - 3

Design of the Study

3.1 Nature of the Study

3.2 The Tools

3.2.1 School Information Blank

3.2.2 Activity Inventory

3.2.3 Attitude Inventory

3.2.4 Workshop - I

3.2.5 Workshop - II

3.2.6 Movement Education Opinionnaire

3.2.7 Feasibility Rating

3.2.8 Administrative Feasibility

3.2.9 M.M.F. Test Battery

3.2.10 R.P.M. Test Battery

3.3 The Sample

3.4 Stages of the Study

3.5 Organizational Framework

3.1 Nature of the Study

The present study has basically a set of philosophic considerations rising up due the fast changing demands of in our society.

"The most vital and far-reaching decisions made in education are philosophically based. Objectives of Education, the organization of the curriculum, the content of courses, and the selection of methodology are established more prevalently by philosophical considerations than through scientific means although the latter are not ignored in reaching decisions".

In the present study the objectives of physical Education, the content of Physical Education curriculum, the methodology of Physical Education, followed at lower primary school level in Mysore district are studied under the objectives 1 and 2, where in six questions are answered. *To achieve first and second objectives, Survey techniques and Assessments techniques are employed.*

Movement Education is the recent trend in Physical Education seen in different parts of the world. The different aspects of Movement Education have been studied and suitable adaptations are evolved applicable primary schools and also a curriculum has been developed. These are covered under the objective 3, where in six questions are answered. *To achieve third objective, two workshops are conducted and the outputs of the workshops are considered as data and are compiled by employing teachings of content analysis of available literature on Movement Education.*

The prepared curriculum was implemented in three schools and the feasibility was assessed. This was covered under objective 4, where in two

specific questions are answered. *To achieve fourth objective, the curriculum was tried out in three schools and its feasibility was assessed through feedback from physical education teachers, parents, and educational administrators. Also an analysis of the impact of new curriculum on children, was done, through pre-test and post-test of three selected variables.*

Thus the present research study is a philosophic study supported by Survey, Assessment, Content Analysis, Feasibility Study and Impact Study.

3.2 The Tools

In the present study Ten Tools have been used. One questionnaire, two inventories, an opinionnaire and a rating scale are prepared and also two standardized test batteries are used. Since the study is basically philosophic in nature, output of two workshops and experts decisions are also admitted as methodical requirements and are considered as tools to collect relevant information to arrive at conclusions.

3.2.1 School Information Blank

To identify the physical facilities available for conducting physical education classes in the Mysore city, a school information blank (Annexure-1) is designed. Questions for finding out the following facilities were included in the information blank,

1. Name of the School
2. Address of the School
3. Type of school

4. Strength of the School
5. Number of Teaching Staff
6. Period allotment for Physical Education
7. Name and qualification of the Physical Education teacher
8. List of Physical Education equipments available in school
9. Budget earmarked to Physical Education (2001-02)
10. Available Sports Ground
11. Drinking Water facilities
12. Sanitary Facilities

The validity and reliability of the information are inbuilt in the content of the questionnaire.

3.2.2 Activity Inventory

The curriculum detailing activities for lower primary stage in physical education are made available to all the schools by the education department. It was desired in the present study to know which of these activities are being implemented in the schools. With this objective an open-ended questionnaire was prepared, where in teachers were asked to list the activities conducted month wise according to their Annual Program of Work. (Annexure-2). The schools from where the data were received voluntarily have been considered. Providing data was not made compulsory although questionnaire were sent to all lower Primary Schools in Mysore city. Validity and reliability are inbuilt in the content of Activity Inventory.

3.2.3 Attitude Inventory

Ten attitude statements were prepared by the investigators, for assessing the attitude of (i) Physical Education teachers and (ii) General teachers towards physical education. The ten statements were rated on 10point scale by five experts. Based on highest rating five attitude statements were confirmed for its suitability. Thirty statements were prepared which projected the five confirmed attitude statements and based on rating of five experts fifteen statements were chosen to form the Attitude Inventory. (Annexure-3)

Validity rating was obtained by five experts on 10point scale for the Attitude Inventory. The ratings are consolidated in Table - 1.

Table - 1
Consolidated Rating of validity of Attitude Inventory

The Attitude Statement No.	1			2			3			4			5		
Statement No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Average Rating	8	7	9	8	9	7	9	8	7	8	8	7	8	8	9
Average Rating for Validity of the Inventory - 8															

3.2.4 Workshop - I

With the aim of working out content analysis on different dimensions of movement education a workshop of selected physical education teachers

was arranged on 21st and 22nd April 2003 at Regional Institute of Education, Mysore. As a pre-workshop activity, a working paper, approved by a core committee, was made available to all the participants of the Workshop-I (Annexure-4). The output of workshop was considered as data for the content analysis along with related literature. Thus Workshop - I is projected as a tool in the present study.

3.2.5 *Workshop - II*

Workshop-II was conducted on 5th and 6th July 2003 at RIE. Objective of the workshop was to prepare a curriculum of Movement Education for lower primary stage. As a pre-workshop activity a meeting of participants Workshop-I was convened on 2nd May 2003 at RIE and guidelines for choosing the activities based on movement analysis was prepared (Annexure-5). This guideline was made available to the 25 participants of Workshop - II. A draft activity list along with evaluation procedures was prepared in the two-day workshop. The output of the Workshop-II is considered as data for the content analysis and preparation of curriculum. Thus Workshop - II is projected as tools in the present study.

3.2.6 *Movement Education Opinionnaire*

The Movement Education curriculum was implemented in three schools during July to November 2003 on a sample of 150 children, drawn from I Std. to V Std. With the objective of assessing the opinion of parents and teachers on Movement Education curriculum, an opinionnaire was

prepared with twenty opinion statements. The twenty opinion statements were rated by five experts for its suitability and ten statements were chosen based on high rating. These ten statements constitute the Movement Education opinionnaire (Annexure-6). Five experts rated this opinionnaire for validity. The ratings on the opinion statements are as follows,

Table - 2
Opinionnaire of Movement Education

Sl.No	Statements	Average Rating
1	Children feel very happy to perform movement activities	8
2	Children explain to their parents about the activities they perform with excitement and satisfaction.	7
3	Children get ready for Movement Education classes on their own even without the instruction of teacher.	9
4	Children discuss and help each other in the Movement Education classes.	7
5	Inclusion of Movement Education activities gives a new look to the primary school.	8
6	Movement Education activities will improve learning readiness in children.	9
7	The Movement Education activities do not improve the classroom learning of children.	9
8	Some of the Movement activities are found difficult and children may get hurt.	9
9	Movement Education should be provided in all primary schools.	8
10	Movement Education classes will improve the concentration and thinking ability of Primary school children.	7

3.2.7 Feasibility Rating

A ~~two~~-point rating was listed on the activities implemented for the feasibility study (Annexure-7). The project teachers and all teachers of cooperating schools (of feasibility study) were asked to rate the activities for its feasibility on two point scale as "Yes/No". The face validity and reliability are accepted for this tool.

3.2.8 Administrative Feasibility

A meeting of educational administrators was convened to know the administrative feasibility of the curriculum. The validity of the rulings obtained in the meeting is accepted on the basis of the expertise of the ~~members of the committee (List - Annexure-8).~~

3.2.9 M.M.F Test Battery

A standardized test battery having a norm table applicable to Mysore city district is employed for assessing Exteroceptive ability, Proprioceptive ability and Motor Memory Ability of children. The abilities were measured before implementation of the curriculum and also after implementation of the curriculum both on an experimental group and controlled group of Impact Study. Validity of this test battery is reported by the author as 0.8 and reliability as 0.7 (Annexure-9).

3.2.10 R.P.M. Test Battery

A culture free standardized Test Battery, "The Raven's Progressive Matrices" tests (Annexure-10) was used to identify the groups of students for impact assessment on an experimental design. Based on the test scores equivalent groups were chosen and arranged as controlled and experimental group.

3.3 The Sample

- (i) The entire populations of lower primary school teachers in Mysore City were taken as sample for assessing attitude towards Physical Education. List of schools are provided in Annexure - 11
- (ii) All lower primary schools of Mysore City are considered the sample for collecting data with regard to the existing activities and evaluation procedure in Physical Education. (200 schools) list of schools are provided in Annexure - 11
- (iii) Three schools were selected for the feasibility study of the "*Movement Education curriculum for lower primary school*". List of schools are provided in Annexure - 12
- (iv) Impact study was done on five Controlled groups and five Experimental groups, chosen from the three school, which were selected for the feasibility study. The equivalence of the groups for the experimental design was confirmed on the basis of the scores of RPM Test. The details of the sample are as follows,

Table - 3
Equivalent Groups for Impact Study

Class	Controlled Groups		Experimental Groups	
	Name of the School	No. of Students	Name of the School	No. of Students
I Std.	Institute of Education Higher Primary School, Vidyaranyaapuram	30	Sagar S.G.K Lower Primary School, Bandipalya	30
II Std.	Sagar S.G.K Lower Primary School, Bandipalya.	30	Govt. Sharadavilas Higher Primary School Kanakagiri	30
III Std.	Sagar S.G.K Lower Primary School, Bandipalya.	30	Govt. Sharadavilas Higher Primary School Kanakagiri	30
IV Std.	Govt. Sharadavilas Higher Primary School, Kanakagiri	30	Institute of Education Higher Primary School Vidyaranyaapuram	30
V Std.	Govt. Sharadavilas Higher Primary School, Kanakagiri	30	Institute of Education Higher Primary School Vidyaranyaapuram	30

Although the strength of the classes were between thirty-forty. The test was administered only for 30 students. List of Students is furnished in Annexure - 13.

3.4 Stages of Study

The project was split into six stages as follows,

- First Stage* - *Preparatory Work*
- (i) Arrangement of staff
 - (ii) Forming committees
 - (iii) Preparation of Tools

- Second Stage* - *Pilot study*
 - (i) Sample selection
 - (ii) Standardization of Tools
- Third Stage* - *Collection of data*
 - (i) Through Questionnaires
 - (ii) Through Workshops
- Fourth Stage* - *Preparation of the Curriculum*
- Fifth Stage* - *Feasibility Study of the Curriculum*
 - (i) Selection of Schools
 - (ii) Co-opting project teachers
 - (iii) Implementation and Collection of data
- Sixth Stage* - *Processing of Data and Writing the report*

The project was designed for twelve months. Due to unavoidable circumstances extension was sought by competent authority and was completed in a period of fifteen months.

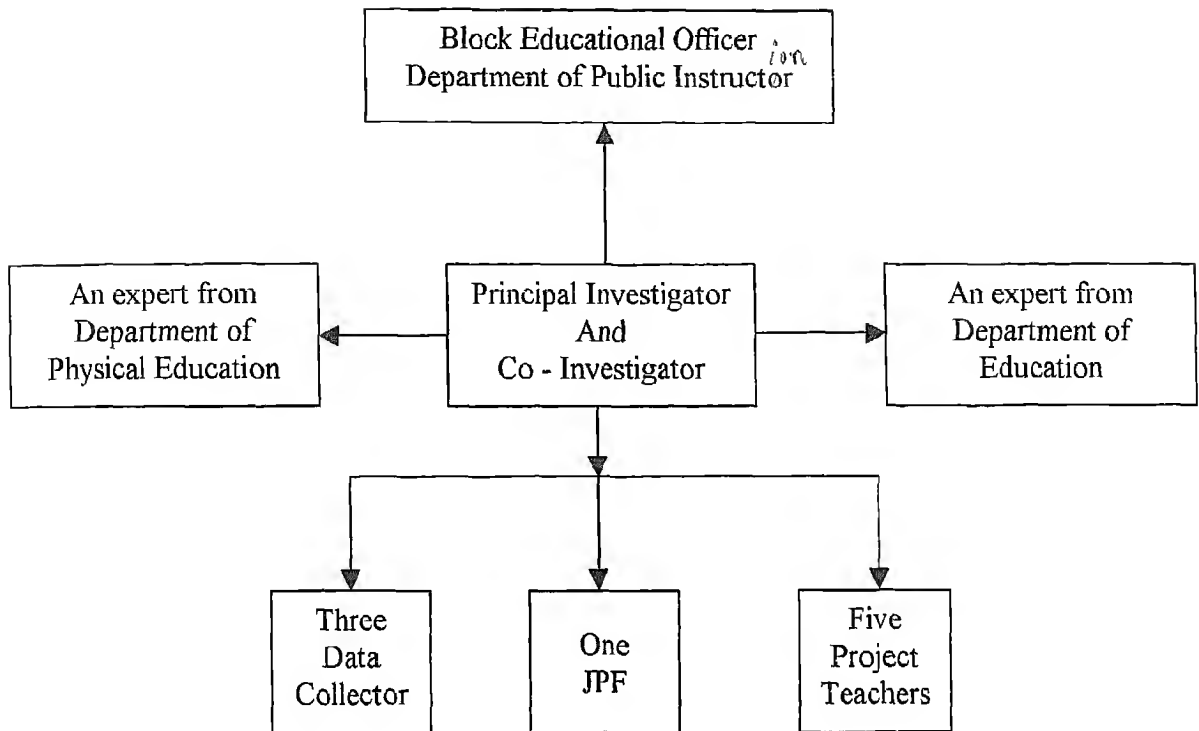
3.5 Organizational Framework

- 1) The Principal Investigator and Co- Investigators had consultations with Sri. R. Raghunandan, Block Educational Officer, Mysore South. Consultations and support were obtained from Dr. M. Chadrakumar, Professor of Physical Education, Dept. of Studies in Physical Education and Sports Sciences,

University of Mysore. Five teachers were co-opted to work in three Lower Primary Schools, under the feasibility study of the Movement Education curriculum.

- 2) Three data collectors were sent to 200 schools of Mysore district for collection of data.
- 3) JPF was appointed for the period of 3 months and as the work turned out by JPF connected with the project was not satisfactory, after the completion of three months it was decided not to continue the services of JPF or appoint any new JPF, since JPF was not required in the opinion of the Investigators. It was decided to get the feasibility study (and the impact study) work done by five selected teachers who attended the two workshops.
- 4) A core committee was constituted under the Chairmanship of Dr. M. Chandrakumar, Professor of Physical Education, for reviewing a document on Movement Education proposed by Dr. P.V. Sudarshan, Co-Investigator. The document proposed for their discussion in the core committee was reviewed and approved by the committee. Members of the committee are listed in Annexure-14.
- 5) A committee of Educational Administrators from Mysore District was constituted under the chairmanship of Sri. R. Raghunandan, Block Educational Officer, to review the administrative feasibility of the Movement Education Curriculum. List of the members of the committee is given in Annexure - 15.

Flow Chart - 1
Organizational Framework



Chapter - 4

Analysis of Data

4.1 First Objective

4.1.1 Attitude towards Physical Education

4.1.2 Existing Aims and Objectives

4.1.3 Existing Syllabus in Physical Education

4.1.4 Physical Education activities in Schools

4.1.5 The Infrastructure

4.1.6 Discussion of Results

4.2 Second Objective

4.2.1 Existing Evaluation Procedures in Physical Education

4.2.2 Evaluation Procedures followed in the schools of Mysore city

4.2.3 Discussion of Results

4.3 Third Objective

4.3.1 Different facets of Movement Education

4.3.2 Curriculum of Movement Education

4.3.3 Discussion of Results

4.4 Fourth Objective

4.4.1 Feasibility of the New Curriculum

4.4.2 Impact of New Curriculum

4.4.3 Discussion of Results

4.1 First Objective

The first objective of present study is " To study the curriculum of Physical education followed in lower primary schools of Mysore District". Under this objective the following questions are answered

1. What is the attitude of Primary School Teachers towards Physical Education?
2. What are the existing Aims and Objectives of Physical Education for Primary School Level? (1st to 5th Std)
3. What is the existing content of the curriculum of Physical Education for Lower Primary School Level? (1st to 5th Std)
4. What are the activities of Physical Education taught in Lower Primary Schools of Mysore city?
5. What are the Infrastructure facilities available for Physical Education in Lower Primary Schools of Mysore city?

4.1.1 Attitude towards Physical Education

The successful implementation of a curriculum depends on the attitude of Headmaster and the teachers towards the curriculum at large. Hence it was designed in the present study to identify the attitude of the headmaster and teachers towards Physical Education. The fifteen attitude statements of the attitude inventory are classified as follows,

Table -4
The Attitude Statements

Sl. No.	Attitude Statements	Attitude Inventory Statement Numbers
1	Physical Education activities caters to the Physical Development of the children	4,9,12
2	Physical Education activities caters to the Mental Development of the children	1,2,5
3	Physical Education activities caters to the Moral Development of the children	6,10,15
4	Physical Education activities caters to the Social Development of the children	3,11,13
5	Physical Education activities caters to the Emotional Development of the children	7,8,14

The above five attitude statements together reveals the attitude toward Physical Education activities.

The data obtained from the Attitude Inventory were consolidated and scored using Likert's method as follows,

- | | | |
|----------------------|------|-------------------|
| 1. Strongly Agree | (++) | Positive Attitude |
| 2. Agree | (+) | Positive Attitude |
| 3. Nutral | (0) | Nutral |
| 4. Disagree | (-) | Negative Attitude |
| 5. Strongly Disagree | (--) | Negative Attitude |

The consolidate scores for eight attitude statements are given in Table - 5.

Table - 5
Attitude of Headmasters

Sl. No.	Attitude Statements	Attitude Measured in percents				
		++	+	0	-	--
1	Physical Education activities caters to the Physical Development of the children	64	33	1	2	0
2	Physical Education activities caters to the Mental Development of the children	0	2	8	35	55
3	Physical Education activities caters to the Moral Development of the children	37	20	8	34	0
4	Physical Education activities caters to the Social Development of the children	49	24	15	12	0
5	Physical Education activities caters to the Emotional Development of the children	59	34	5	2	0

Table - 6
Attitude of Physical Education teachers

Sl. No.	Attitude Statements	Attitude Measured in percents				
		++	+	0	-	--
1	Physical Education activities caters to the Physical Development of the children	80	20	0	0	0
2	Physical Education activities caters to the Mental Development of the children	15	25	12	40	8
3	Physical Education activities caters to the Moral Development of the children	52	38	10	0	0
4	Physical Education activities caters to the Social Development of the children	40	50	8	2	0
5	Physical Education activities caters to the Emotional Development of the children	62	24	12	2	0

Table - 7
Attitude of General teachers

Sl. No.	Attitude Statements	Attitude Measured in percents				
		++	+	0	-	--
1	Physical Education activities caters to the Physical Development of the children	62	24	11	3	0
2	Physical Education activities caters to the Mental Development of the children	1	3	5	42	49
3	Physical Education activities caters to the Moral Development of the children	13	21	7	38	20
4	Physical Education activities caters to the Social Development of the children	21	28	18	19	14
5	Physical Education activities caters to the Emotional Development of the children	24	17	12	26	21

Based on Table-5, Table-6 and Table-7 the attitude towards Physical Education of Headmasters, Physical Education Teachers and general teachers are given in Table - 8.

Table - 8
Attitude Towards Physical Education

Sl. No.	Category	Attitude Measured in percents				
		++	+	0	-	--
1	Headmasters Attitude	42	23	7	17	11
2	Physical Education Teachers Attitude	50	31	8	9	2
3	General Teachers Attitude	37	24	8	21	10

4.1.2 Existing Aims and Objectives

In the primary school revised syllabus published by D.S.E.R.T., Bangalore, the allotment of period for I to VII Std. for Physical Education and Health Education have been stated. Physical Education is stated as one of the co-curricular subject and the syllabus for Physical Education is not stated.

The Aims and Objectives of Physical Education for primary schools as stated by the DIET Mysore District (Available in Kannada; Annexure - 16) are as follows,

(a) List of General Objectives

1. To create Mental, Physical, Emotional and Moral stability in children.
2. To develop personal and social characters in children to make them have happy living personally and socially.
3. To give basic skills and correct knowledge about human activities.
4. Development of self-confidence, courage, co-operation, Leadership and sportsman characters.
5. To develop abilities for organizing, celebration of sports activities, days of national importance, first aid, red cross, guidance day.
6. To develop aesthetic sense and healthy habits in sports activities.

(b) List of Specific Aims

1. To improve mental, physical health of children.
2. To teach the basic skills, running, jumping and throwing.
3. To develop socialization qualities by making children play together.
4. To provide leisure from the fatigue of traditional activities in the school.
5. To reduce mental and emotional stress by and to provide satisfaction through participation in sports.
6. Not only to participate in rhythmic activities as a participant but also as a spectator.
7. To develop creative thinking.

4.1.3 Existing Syllabus in Physical Education

The content specified for I Std. to V Std. for primary schools as stated by the DIET Mysore District (Available in Kannada; Annexure - 17) are as follows,

Table - 9
Syllabus of I Std.

I. Informal Activities - 20 Periods	a. Free movements
	b. Play with equipments
	c. Imitation of Animals
II. Formal Activities - 40 Periods	a. Exercise Table-1
	b. Exercise Table-2
	c. Exercise Table-3
III. Games - 70 periods	a. 9 simple games
	b. Lead up games
	c. Recreational games
	d. Action songs

Table - 10
Syllabus of II Std.

I. Informal Activities - 20 Periods	a. Free movements
	b. Play with equipments
	c. Imitation of Animals
II. Formal Activities - 40 Periods	a. Exercise Table-1
	b. Exercise Table-2
	c. Exercise Table-3
	d. Exercise Table-4
	e. Exercise Table-5
III. Games - 70 periods	a. 9 simple games
	b. Lead up games
	c. Recreational games
	d. Action songs

Table - 11
Syllabus of III Std.

I. Informal Activities - 25 Periods	a. Free movements - Jumping, Speed Walking, etc
	b. Play with equipments - Swings, Ladder Climbing, See-saw, etc
	c. Physical Exercise
	d. Yogic Exercise - Padmasana & Suryanamaskara
II. Formal Activities - 20 Periods	a. Foot Drill - Attention, Stand-at-ease, Left-Right turn, etc
	b. Apparatus Exercise - Kolata, Flag Drill
III. Mass P.T - 30 Periods	a. Exercise Tables
IV. Games - 25 periods	a. Simple games
	b. Lead up games
	c. Rhythmic Activities
V. Recreational Games - 10 Periods	a. Swimming
	b. Articultural
	c. Group Songs
	d. Story play

Table - 12
Syllabus of IV Std.

I. Informal Activities - 10 Periods	a. Exercises Table - 1 to 5
II. Athletics - 10 Periods	a. 50-75mtrs run
	b. Long jump
	c. Throw ball
III. Formal Activities - 25 Periods	a. Calisthenics - Exercise table, Mass P.T
	b. Folk Songs
	c. Apparatus Exercise - Dumbbells drill, Flag Drill, etc
	d. Yogic Exercise - Padmasana, Suryanamaskar
	e. Foot Drill, March past
IV. Games - 30 periods	a. 7 Simple games
	b. 6 Relay Games
	c. Combatives - 4 games
V. Recreational Games - 15 Periods	a. Hikes
	b. Story Play
	c. Group Songs

Table - 13
Syllabus of V Std.

I. Informal Activities - 10 Periods	a. Running
	b. Exercises Tables
II. Exercises with Equipments - 10 Periods	a. Lezium
	b. Dumbbells
	c. Flag drill
III. Games - 20 periods	a. Simple games
	b. Relay Games
	c. Lead up games
	d. Major Games
	e. Combat games
	f. Recreational Games
IV. Athletics - 10 Periods	a. 100 mtrs run
	b. High Jump
	c. Long jump
	d. Throw ball
	e. Yogic Exercise - Dand-bitak, Suryanamaskar, Sirasasana
V. Pyramids	a. Four pyramids
VI. Marching	

4.1.4 Physical Education Activities in Schools

To find out the activities of Physical Education taught in Lower Primary Schools of Mysore city, an open-ended questionnaire was administered. Through the questionnaire activities taught to children based on the annual program of work of teachers were collected. The data collected through the activity inventory is given in Annexure - 18.

The activities followed in more than 60% of the schools in the Mysore City are groped appropriately and given in the following tables,

Table - 14
Activity Inventory I Std.

Month	The Activity
June	1. Informal Activities - Running freely
	2. Games - Simple games
	3. March past
	4. Mass P.T Exercises
July	1. Running and walking in line
	2. Games - Simple games, Lead up games
	3. Foot Drill and March past
	4. Exercise Tables and sitting series
August	1. Informal Activities - Run, sit, stand, walk, imitation of animals
	2. Minor Games
	3. Exercise Tables and preparation of Independence day celebration
	4. Foot Drill and March past
September	1. Informal Activities - Run, sit, stand, walk in line
	2. Minor Games
	3. Exercise Tables and preparation for Teachers day celebration
	4. Foot Drill and March past
October	1. Informal Activities - Running, Standing, Sitting, Jumping, Skipping
	2. Minor games, Recreation games, songs
	3. Mass P.T
	4. Foot Drill and March past
November	1. Minor games, Recreation games, songs
	2. Mass P.T - Hoops and Dumbbells
	3. Foot Drill and March past
	4. Athletics
December	1. Simple games
	2. Athletics
	3. Mass P.T
	4. Foot Drill and March past

January	1. Minor Games, Recreational Games, songs
	2. Mass P.T - Ribbon drill
	3. Foot Drill and March past
	4. Annual sports competitions
February	1. Minor Games, Recreational Games, songs
	2. Mass P.T
	3. Athletics
	4. Revision

Table - 15
Activity Inventory II Std.

Month	The Activity
June	1. Informal Activities - Running freely
	2. Games - Simple games
	3. March past
	4. Mass P.T Exercises
July	1. Running and walking in line
	2. Games - Simple games, Lead up games
	3. Foot Drill and March past
	4. Exercise Tables and sitting series
August	1. Informal Activities - Run, sit, stand, walk, imitation of animals
	2. Minor Games
	3. Exercise Tables and preparation of Independence day celebration
	4. Foot Drill and March past
September	1. Informal Activities - Run, sit, stand, walk in line
	2. Minor Games
	3. Exercise Tables and preparation for Teachers day celebration
	4. Foot Drill and March past
October	1. Informal Activities - Running, Standing, Sitting, Jumping, Skipping
	2. Minor games, Recreation games, songs
	3. Mass P.T
	4. Foot Drill and March past
November	1. Minor games, Recreation games, songs
	2. Mass P.T - Hoops and Dumbbells
	3. Foot Drill and March past
	4. Athletics
December	1. Simple games
	2. Athletics
	3. Mass P.T
	4. Foot Drill and March past
January	1. Minor Games, Recreational Games, songs
	2. Mass P.T - Ribbon drill
	3. Foot Drill and March past
	4. Annual sports competitions
February	1. Minor Games, Recreational Games, songs
	2. Mass P.T
	3. Athletics

Table - 16
Activity Inventory III Std.

Month	The Activity
June	1. Informal Activities - Running freely
	2. Games - Simple games
	3. March past
	4. Mass P.T Exercises
July	1. Running and walking in line
	2. Games - Simple games, Lead up games
	3. Foot Drill and March past
	4. Exercise Tables and sitting series
August	1. Informal Activities - Run, sit, stand, walk, imitation of animals
	2. Minor Games
	3. Exercise Tables and preparation of Independence day celebration
	4. Foot Drill and March past
September	1. Informal Activities - Run, sit, stand, walk in line
	2. Minor Games
	3. Exercise Tables and preparation for Teachers day celebration
	4. Foot Drill and March past
October	1. Informal Activities - Running, Standing, Sitting, Jumping, Skipping
	2. Minor games, Recreation games, songs
	3. Mass P.T
	4. Foot Drill and March past
November	1. Minor games, Recreation games, songs
	2. Mass P.T - Hoops and Dumbbells
	3. Foot Drill and March past
	4. Athletics
December	1. Simple games
	2. Athletics
	3. Mass P.T
	4. Foot Drill and March past
January	1. Minor Games, Recreational Games, songs
	2. Mass P.T - Ribbon drill
	3. Foot Drill and March past
	4. Annual sports competitions
February	1. Minor Games, Recreational Games, songs
	2. Mass P.T
	3. Athletics
	4. Revision

Table - 17
Activity Inventory IV Std.

Month	The Activity
June	1. Informal Activities - Running freely
	2. Games - Simple games
	3. March past
	4. Mass P.T Exercises
July	1. Running and walking in line
	2. Games - Simple games, Lead up games
	3. Foot Drill and March past
	4. Exercise Tables and sitting series
August	1. Informal Activities - Run, sit, stand, walk, imitation of animals
	2. Games: Kho-Kho, Kabbadi
	3. Exercise Tables and preparation of Independence day celebration
	4. Foot Drill and March past
September	1. Informal Activities - Run, sit, stand, walk in line
	2. Minor Games and Kho-Kho, Kabbadi
	3. Exercise Tables and preparation for Teachers day celebration
	4. Foot Drill and March past
October	1. Informal Activities - Running, Standing, Sitting, Jumping, Skipping
	2. Minor games, Recreation games, songs
	3. Mass P.T
	4. Foot Drill and March past
November	1. Minor games, Recreation games, songs
	2. Mass P.T - Hoops and Dumbbells
	3. Foot Drill and March past
	4. Athletics: 100mtrs run, Long jump, Ball throw
December	1. Simple games
	2. Athletics
	3. Mass P.T
	4. Foot Drill and March past
January	1. Minor Games, Recreational Games, songs
	2. Mass P.T - Ribbon drill / Folk Dances
	3. Foot Drill and March past
	4. Annual sports competitions
February	1. Minor Games, Recreational Games, songs
	2. Mass P.T
	3. Athletics and Kho-Kho, Kabbadi
	4. Revision

Table - 18
Activity Inventory V Std.

Month	The Activity
June	1. Informal Activities - Running freely
	2. Games - Simple games
	3. March past
	4. Mass P.T Exercises
July	1. Running and walking in line
	2. Games - Simple games, Lead up games
	3. Foot Drill and March past
	4. Exercise Tables and sitting series
August	1. Informal Activities - Run, sit, stand, walk, imitation of animals
	2. Minor Games
	3. Exercise Tables and preparation of Independence day celebration
	4. Foot Drill and March past
September	1. Informal Activities - Run, sit, stand, walk in line
	2. Minor Games
	3. Exercise Tables and preparation for Teachers day celebration
	4. Foot Drill and March past
October	1. Informal Activities - Running, Standing, Sitting, Jumping, Skipping
	2. Minor games, Recreation games, songs
	3. Mass P.T
	4. Foot Drill and March past
November	1. Minor games, Recreation games, songs
	2. Mass P.T - Hoops and Dumbbells
	3. Foot Drill and March past
	4. Athletics: 100mtrs run, Long jump, Ball throw
December	1. Simple games
	2. Athletics: 100mtrs run, Long jump, Ball throw
	3. Mass P.T
	4. Foot Drill and March past
January	1. Minor Games, Recreational Games, songs
	2. Mass P.T - Ribbon drill
	3. Foot Drill and March past
	4. Annual sports competitions
February	1. Minor Games, Recreational Games, songs
	2. Mass P.T: Dumbbells, Flag, Exercise Tables
	3. Athletics: 100mtrs run, Long jump, Ball throw
	4. Revision

4.1.5 The Infrastructure

(a) The following facilities are required for a Lower Primary Schools for conducting Physical Education activities as per the requirement of Dep. of Education.

1. Specialized Physical Education Teacher
2. Minimum of 50X50 Play Ground
3. Equipments: Dumbbells, Wands, Hoops, P.T. Flags, Skipping Ropes
4. Drinking Water Facility
5. Sanitation Facility

(b) The data of infrastructural facilities available for Physical Education in the Lower Primary Schools of Mysore city are collected through the questionnaire is given in the following table

Table - 19
The Minimum Infrastructure Available

Sl. No	The Facility	Percentage of Schools
1	Specialized Physical Education Teacher	50%
2	Minimum of 50X50 Play Ground	65%
3	Equipments: Dumbbells, Wands, Hoops, P.T. Flags, Skipping Ropes	50%
4	Drinking Water Facility	99%
5	Sanitation Facility	99%

4.1.6 Discussion of Results

- (i) It is found from Table - 8 that 65% of Headmaster have positive attitude and 28% of Headmaster have negative attitude towards Physical Education. Whereas 41% of General teachers have positive attitude and 47% of them have negative attitude towards Physical Education. 81% of Physical Education teachers have positive attitude and 11% of them have negative attitude.

- (ii) The existing aims and objectives are not listed in specific terms. Few examples are listed below,

The first general objective is "to create Mental, Physical, Emotional and Moral stability" in children, creating "Mental and Physical stability requires for further clarification.

The third objective is "to give basic skills and correct knowledge about human activities" also needs clarification.

The fifth objective is "to develop ability of organizing _____ " is not fitting to the age group of Lower Primary children.

In the list of specific aims the fourth aim is stated as "to provide leisure from the fatigue of traditional activities in the school". This objective is debated by physical educationist and is supposed to an outdated aim, and was relevant during pre-independence period.

- (iii) The content of the curriculum is listed in 4.1.3. The chapter headlines can be modified still better and also formal activities like exercise tables prescribed for standard-I, standard-II are not suitable for Lower age group children. Yogic exercises can prescribed in a better manner, since shirasaasana is not advisable for lower primary children.
- (iv) The activity inventory listed in 4.1.4 is found matching with the prescribed syllabus except yogic exercises are not found taught in

four schools out of eighty schools. The minor games taught in different schools are found to be very much varied.

- (v) The infrastructural facilities listed in 4.1.5 (a) and (b) reveal that 50% of schools have specialized Physical Education Teacher. 65% of the schools have suitable playground facilities and about 50% of the schools have the required equipments as hoops, wands, and dumbbells. 99% of schools have drinking water and sanitation facilities. No school is reported to have balance beams, mattress, swings, slides, see-saw, jungle gym and other such equipments, since activities using them are not specified in the syllabus.

The discussion presented in 4.1.6 highlight the achievement of first objective of the present study.

4.2 Second Objective

The second objective of the study is "to study the Evaluation programs in Physical Education in Lower Primary Schools of Mysore district." Under this objective the following questions are answered.

1. What is the Evaluation procedure in Physical Education prescribed in Lower Primary Schools?
2. Is the prescribed Evaluation Procedure being followed in all the schools of Mysore city?

4.2.1 Existing Evaluation Procedures in Physical Education

The Evaluation procedure prescribed in the curriculum is as follows,

Internal evaluation is prescribed for Physical Education. Teachers are expected to maintain record of the activities conducted and observation records, and also any other records suitable for evaluation of children.

The evaluation should be reported to parents in grades. The grades prescribed are as follows,

Table - 20
The Grade Table

Grades	Marks
A	80 - 100
B	60 - 79
C	40 - 59
D	20 - 39
E	0 - 19

4.2.2 Evaluation Procedures followed in Schools of Mysore City

An open ended question was included in the activity inventory for knowing the evaluation procedure followed by in the different schools of Mysore District. The answers received are in the following table.

Table - 21

Evaluation procedures in Physical Education

Sl. No.	The Procedures	Percentage of schools
1	Conducting of Annual Examination	10
2	No Examination Evaluation	90

4.2.3 Discussion of Results

- (i) The prescribed evaluation procedure as stated in 4.2.1 reveals that the evaluation and giving grades is subjective and left to the discretion of physical education teachers. Since the procedures for evaluation of the prescribed activities are not stated separately and specifically.
- (ii) The evaluation procedures followed in schools as stated in 4.2.2 reveals that the no serious attempts are made by teachers to evaluate the learning of Physical Education activities appropriately.

The discussion presented in 4.2.3 highlights the achievement of second objective of the present study.

4.3 Third Objective

The third objective of the study is "To study the different facets of Movement Education, and to prepare a curriculum based on Movement Education for Lower Primary Schools."

This is achieved through two workshops.

4.3.1 *The Different Facets of Movement Education - Workshop I*

A document on different facets of Movement Education was prepared in three stages of activity involving the workshop - I.

(a) First Stage: Pre Workshop Activity

The different facets of Movement Education identified for the study are as follows,

- II. Definitions of Movement Education
- III. Aims and Objectives of Movement Education
- IV. Areas of activities for The Movement Education.
- V. Teaching Methods in Movement Education.

Based on the above list of facets of Movement Education a draft copy of discussion document was prepared by Dr. P.V. Sudarshan, Co-Investigator of the project (Annexure - 19). A core committee chaired by Dr. M. Chandrakumar, Professor of Physical Education, University of Mysore reviewed this draft document. Proceeding of the core committee meeting is as follows,

A Core - Committee was constituted for finalizing a *"Discussion Document for the Workshop"* on the Subject *"Different Facets of Movement Education"* Proposed under the ERIC Project titled *"Physical Education Curriculum at Lower Primary Stage - an Evaluation"*.

The Core Committee met on 17th and 18th of March 2003, at Regional Institute of Education. *Dr. M. Chandrakumar*, Professor of Physical Education, University of Mysore, chaired the meeting.

Proceedings of the Core - Committee Meeting

Members Present:

- 1) Dr. M. Chandrakumar
- 2) Dr. P.V. Sudarshan
- 3) Dr. V. Venkatachala
- 4) Mr. Kappanna
- 5) Mr. Balaji Rao
- 6) Miss. Rashmi Ramakrishna

Dr. M. Chandrakumar, Professor of Physical Education, University of Mysore, presided over the meeting.

Dr. V. Venkatachala, Co - Ordinator welcomed the members and briefed the purpose of the meeting.

I. *Present status* of Physical Education at Lower Primary Level was reviewed.

Mr. Kappanna explained the present scenario of the Physical Education at Lower Primary Level, highlighting the following points.

- 1) A common programme of activities of Physical Education is not prescribed at Lower Primary Level.
- 2) Specialized Physical Education Teachers are not appointed at Lower Primary Level to teach Physical Education activities. Regular classroom teachers carry out Physical Education activities also.

I. All members discussed the **Need** for a well-planned Physical Education curriculum for Lower Primary Level, and the following points were highlighted.

- 1) At present Jungle Jims, Minor Games and such similar activities are provided for Lower Primary children. The specific objectives of these activities are not stated clearly.
- 2) A Curriculum developed through a "Rational Curriculum Planning" procedures is not existing at Lower Primary Level. Hence can be prepared and adopted for all Lower Primary Schools. In Rational Curriculum Planning procedures Aims and objectives have to be stated first, followed by statement of specific objectives for various age groups. After this suitable activities to achieve the specific objective have to be pooled along with prescribing evaluation procedures. By this overall development of children can be achieved to larger extent.

III. Dr. P.V. Sudarshan referred to a **document on "Minimum Level of Learning"** issued by Govt. of Karnataka (Kannada version) and the document was discussed and examined in relation to Movement Education and the following points were highlighted.

- 1) In the Minimum Level of Learning document Physical Education is considered under non-cognitive areas of learning.

- 2) "Movement Education" Provides for cognitive learnings through learning of various movement activities.
- 3) Structuring and prescribing suitable movement activities at Lower Primary Stages can achieve an emphasis on cognitive areas of learning.

IV. Dr. P.V. Sudarshan read out **definitions of "Movement Education"** from the draft copy of "Workshop Discussion Document" and each of the definitions were discussed. The following operational definitions were coined.

Movement Education is defined as follows,

"Movement Education is a part of the total education programme for children, that contributes for the development of efficient movement responses, with an awareness of the capabilities of the body in relation to the components of the movements, contributing to the acquisition of knowledge, understandings and application of variety of movements".

The domain of Movement Education comprises of **three interrelated phases** as "The Basic Movement Education", "The Development/ Movement Education" and "The Expressive Movement Education"

The above three phases of Movement Education are defined as follows,

- i. Basic Movement Education is defined as,
"All experiences that contribute for the learning of *Basic Movement's* along with awareness of body, space, time, force and flow".

Development of Movement Education is defined as,

"All experiences that contribute for the learning of *Movement Patterns* along with awareness of body, space, time, force and flow".

Expressive Movement Education is defined as,

"All experiences that contribute for the learning of *Movement Skills* of sports and games that lead to specific motor abilities.

Aims and Objectives of Movement Education were formulated after a thorough discussion and are as follows,

Aim: The aim of Movement Education is to provide for mental, social and physical development in children of primary school stage, through Basic Movement Education, Developmental Movement Education, Expressive Movement Education.

Primary Objectives: The objectives of Movement Education are,

- (a) *Verbalizing objective*: Children learn to verbalize Movements, and related body parts.
- (b) *Cognitive objective*: Children develop memory, understanding and a variety of thinking behaviours connected with movements.
- (c) *Affective objective*: Children develop tolerance, attention, perseverance, courage, co-operation, leadership - follower ship and self-discipline.
- (d) *Psycho- Motor objective*: Child develops strength endurance and flexibility, to perform variety of movements.

The ***specific objectives*** with regard to Basic Movement Education, Developmental Movement Education and Expressive Movement Education were discussed and were confirmed, as in the "discussion document for the workshop".

The meeting was set to continue on 18th March 2003 at 9.30 am

The meeting continued on 18th March 2003 at 9.30am.

To start with Dr. V. Venkatachala reviewed the previous days discussion.

- VII.** Discussion was continued with regard to the contents and methods of Movement Education. Dr. P.V. Sudarshan read out the details connected with contents and methods from the "Discussion document for the workshop". The details put up in the document were accepted after a thorough discussion.
- VIII.** Dr. M. Chandrakumar, Chairman of the committee suggested to draft a set of movement education activities listing its cognitive objective, for different standards (I to V) and to take up a pilot study on the feasibility of the activities (content).
- IX.** Further it was decided to incorporate out comes of the Core - Committee meetings in the draft paper of "Discussion Document for the Workshop".

Dr. V. Venkatachala, Co-Ordinator of the ERIC Project, **thanked** the chairman and all members of the core committee for their active participation in finalizing the "Discussion Document for the Workshop" (A Working Paper for the Workshop).

Dr. M. Chandrakumar
Chairman, Core Committee

(b) Second Stage: Workshop - I

Based on the proceedings of the core committee, the discussion document prepared by Dr. P.V. Sudarshan was revised and approved. This document was titled as "Working Paper for the Workshop-I" (Annexure- 4), and was issued to twenty selected members from the Department of Public Instruction, Mysore city South block and Mysore city North block.

A workshop for two days was arranged on 21st and 22nd April 2003. The objective of the workshop was to prepare a document on different facets of Movement Education. Twenty members of various category participated in the two-day workshop, which was inaugurated by Dr. M. Chandrakumar, Professor of Physical Education, Dr. Ravindra, Principal, RIE, presided over the function. The output of the workshop - I was compiled and used as a data for third stage of work by the investigators.

(Signature)

(c) Third Stage: Post Workshop Activity

Investigators prepared a document on Different Facets of Movement Education, using the Output of the Workshop - I and by a descriptive analysis of available literature on Movement Education. The document prepared is as follows,

A DOCUMENT ON DIFFERENT FACETS OF MOVEMENT EDUCATION

- (I) Definitions of Movement Education**
- (II) Aims and Objectives of Movement Education**
- (III) Areas of activities for The Movement Education.**
- (IV) Teaching Methods in Movement Education.**

The Background:

From the year 2001-2002, Govt. of Karnataka has introduced Minimum Level of Learning based textbooks in languages, mathematics and environment studies for lower primary school children, and also teachers are continuously trained in new methods of teaching. Children of lower primary school require at least 25 percent of their school time to be devoted for Physical Education. Through Physical Education activities skills of language and mathematics can also be developed. The various cognitive abilities identified under learning of Language, Mathematics and Environmental studies, of lower primary school children can be developed to a large extent through Physical Education activities. The goals and specific objectives of Movement Education activities, stress on the cognitive development of the child. Minimum Level of Learning in Physical Education has not been prescribed for lower primary schools by the State Dept. of Education. Because of this a specific goal oriented curriculum in Physical Education for lower primary school children is not prescribed. Hence, much weightage is not given for Physical education in the lower primary school

education. This has led to a lighthearted approach in providing Physical Education programme at the Lower Primary School stage.

A generally followed definition of Physical Education is, "Physical education is the application of understandings, facts, principles and beliefs to the subject of movement learning experiences in the school setting to modify behavior, broaden perception, develop appropriate concepts and skills, and enrich the quality of life in conjunction with the accepted goals of education". The aims and the objectives derived based on this definition are not much specific to various stages of primary education. It is time now to identify the objectives of physical education with greater specificity for pre - primary, lower primary, higher primary grade children. By this suitable activities can be chosen to achieve specific objectives, and in turn the goals of Physical Education can be achieved to a better extent.

Various concepts and thoughts available under "Movement Education" will provide a base for selection of specific objectives and choosing suitable activities for children of Primary Schools.

I. Definitions of Movement Education

The definitions are as follows,

Movement Education is defined as follows,

"Movement Education is a part of the total education programme for children, that contributes for the development of efficient movement responses, with an awareness of the capabilities of the body in relation to

the components of the movements, contributing to the acquisition of knowledge, understandings and application of variety of movements".

The domain of Movement Education comprises of **three interrelated phases** as "The Basic Movement Education", "The Developmental Movement Education" and "The Expressive Movement Education"

The above three phases of Movement Education are defined as follows,

- i. *Basic Movement Education is defined as,*
"All experiences that contribute for the learning of **Basic Movements** along with awareness of body, space, time, force and flow".
- ii. *Developmental of Movement Education is defined as,*
"All experiences that contribute for the learning of **Movement Patterns** along with awareness of body, space, time, force and flow".
- iii. *Expressive Movement Education is defined as,*
"All experiences that contribute for the learning of **Movement Skills** of sports and games that leads to specific motor abilities.

II. Aims and objectives of movement education

- (i) *Aims of Movement Education are,*

The aim of Movement Education is to provide for mental, social and physical development in children of primary school stage, through Basic Movement Education, Developmental Movement Education, Expressive Movement Education.

(ii) *The primary objectives of Movement Education are,*

- (a) *Verbalizing objective:* Children learn to verbalize Movements.
- (b) *Cognitive objective:* Children develop memory, understanding and a variety of thinking behaviors connected with movements.
- (c) *Affective objective:* Children develop attention, co-operation, tolerance, sharing, self-discipline, obedience, and courage.
- (d) *Psycho - Motor objective:* Child develops ability to apply the cognitive skills in performing variety of movements.

Specific aims and objectives of (i) Basic Movement Education (ii) Developmental Movement Education and (iii) Expressive Movement Education are defined as follows,

(i) Basic Movement Education

Specific Aims

Basic Movement Education aims at,

1. The development of understanding of the Basic Movements of the Body and performing them.
2. The development of awareness of body, space, effort and their relationship.

Specific Objectives

(i) Verbalizing objectives

Child learns to verbalize elements of Basic Movements. Basic Movement elements are, Locomotor, Nonlocomotor, and Manipulative movements.

(ii) Cognitive Objectives

The child develops understandings, remembering and a variety of thinking behaviors connected with Basic Movements, like

1. Child develops memory of sequence of movements.
2. Child develops abilities to select alternative courses of action if required.
3. Child develops awareness of the elements of movement with reference to body, effort, rhythm, space, and environmental relationship relevant to the task.

(iii) Affective Objectives

The child will display tolerance, attention, perseverance, courage and self-discipline.

1. Child develops tolerance to frustration of "Not getting it".
2. Child develops attention to the task on hand by "Lack of distractibility".

3. Child develops perseverance to "Achieve the Goal".
4. Child develops courage to execute a "Difficult task".
5. Child develops self-discipline, to work "According to the Instructions".

(iv) Psycho - Motor Objectives

Child will perform various Basic Movements using knowledge, understanding, and application abilities connected with Basic Movements.

(ii) Developmental Movement Education

Specific Aims

Developmental Movement Education aims at,

1. The development of awareness of body, space, effort and their relationship.
2. The development of understanding of the Basic Movements and Movement patterns and performing them.
3. The Acquisition of skills: related to learning of movement patterns
- various combinations of Basic Movements.
4. The Acquisition of self concepts
5. The Acquisition of Social competency

Specific Objectives

(i) Verbalizing Objectives

Children learn to verbalize various movement patterns. Movement patterns are the different combinations of the Basic Movements - *Locomotor, Nonlocomotor and Manipulative*.

(ii) Cognitive Objectives

Children develop memory, understanding and variety of thinking behavior connected with Basic Movements and Movement Patterns.

1. Child remembers the basic movements involved in the movement pattern.
2. The child combines various basic movements and executes movement patterns in given situations.
3. The Child identifies common basic movements in different movement patterns.
4. The child demonstrates awareness of the elements of movement with reference to body, effort-rhythm, space, and environmental relationship relevant to the task

(iii) Affective Objectives

Child will display tolerance, attention, perseverance, courage and self-discipline.

1. Child develops tolerance to frustration of "Not getting it".
2. Child develops attention to the task on hand by "Lack of distractibility".

3. Child develops perseverance to "Achieve the Goal".
4. Child develops courage to execute a "Difficult task".
5. Child develops self-discipline, to work without direct instructions and supervision.

(iv) Psycho motor Objectives

Child will perform various Movement patterns using knowledge, understanding, and application abilities connected with Basic Movements.

(iii) Expressive Movement Education

Specific Aims

Expressive Movement Education aims at,

1. The development of awareness of body, space, effort and their relationship.
2. The development of understanding of the Basic Movements, Movement patterns and skills of major games and sports, and performs them.
3. The Acquisition of skills related to learning of major games and sports based on various combinations of movement patterns.
4. The Acquisition of self concepts
5. The Acquisition of Social competency

Specific Objectives

(i) Verbalizing Objectives:

Children learn to verbalize various Movement Skills used in major games and sports. The Movement Skills are combinations of "Basic Movements" and "Movement Patterns".

(ii) Cognitive Objectives

Children develop memory, understandings, and variety of thinking behavior connected with skills of major games and sports.

1. The child remembers the basic movements and movement patterns involved in the execution of a skill.
2. The child combines various basic movements and movement patterns to execute a skill in a given situations.
3. The child identifies common basic movements and movement patterns in different skills.
4. The child demonstrates awareness of the elements of movement with reference to body, effort-rhythm, space, and environmental relationship relevant to the task

(iii) Affective Objectives

Child will display tolerance attentions perseverance courage and self-discipline.

1. Child develops tolerance to frustration of "Not getting it".

2. Child develops attention to the task on hand by "Lack of distractibility".
3. Child develops perseverance to "Achieve the Goal".
4. Child develops courage to execute a "Difficult task".
5. Child develops self-discipline, to work without direct instructions and supervision.

(iv) *Psycho motor Objectives:*

Child will perform skills of various sports and games using knowledge, understanding, and application abilities connected with Basic Movements and Movement patterns.

III. Areas of activities

Three interrelated program areas for children can be identified, under Movement Education. The first area emphasizes understanding of self-movement - 'The Basic Movement Education', the second area stresses the development of skills and associated knowledge in games, dance, gymnastics and aquatics - "The Developmental Movement Education", the third area of activity serves as the vehicle for organized or formal expression of movement abilities in individuals' specialized skill-based sports and games - "The Expressive Movement Education".

(i) *Areas of activities of Basic Movement Education*

The areas of activities of Basic Movement Education encompasses the movement elements that can be considered under Locomotion, Non Locomotion and Manipulation.

1. Locomotion: The distinguishing characteristic of locomotor actions is that a change in place or, as we will frequently say to children. "Your floor space," is involved. All locomotor patterns move the entire body from one place to another place. The distance is unimportant. Travelling may be performed by rolling, by using both the hands and the feet either simultaneously or alternately, or by using the feet alone.
2. Nonlocomotion: The distinguishing characteristic of nonlocomotor actions is that absolutely no change in place is involved, although the body may be very active. As long as the weight of the body remains over its base, feet, hands and feet, or other body parts and that base does not move, there is no locomotion taking place. The activities are best characterized as efforts to balance, to move various parts of the body in a variety of ways, or to reduce movement by relaxing either all or part of the body. One activity that requires some kind of apparatus like a low horizontal bar is called suspension. The fundamental motor pattern of suspension is a prerequisite to all forms of swinging actions.
3. Manipulation: When objects are handled, they are manipulated. They may be held, propelled or caught in some fashion. The distinguishing characteristic of manipulative actions is the focus on the management of some kind of an object, be it a ball, rope, hoop, or something else.

(ii) Areas of activities of Developmental Movement Education

The areas of activities of Developmental Movement Education encompasses, Minor Games, Gymnastics, Dance, Aquatics, Yogic exercises, Rhythmic, Drill and Marching. Each area offers the learner an opportunity to enrich specific competencies through the acquisition of movement patterns that, in turn, strengthen self-concepts that open the way toward social competency. Movement patterns enable individuals to cope efficiently with everyday problems and challenges. Learning of movement patterns are very important purpose in the lower primary school physical education.

(iii) Areas of activities of Expressive Movement Education

The areas of activities of Expressive Movement Education encompass competencies of major games and sports.

IV. Methods in Movement Education:

Some lessons are more specifically movement oriented, others less so, depending upon the objectives. All are dependent on the learners having acquired a basic movement vocabulary so that directions, questions, observations, analysis, and assessment are easily understood-so that it is also possible for learners to acquire the ability to teach each other.

Attainment of goals and objectives included in Movement Education cannot be achieved through directed learning alone. Children need to grow in their ability to think and to operate independently with a growing

understanding of the movements and its relationships. Children need to learn how to live with freedom, an objective that cannot be achieved from directed learning. One way to assure the compliance of teachers is to require them to identify the objectives and the goals and to adopt suitable methods.

The Traditional Command Style

Directed or command-style teaching is an effective means of imparting information when its limitations are recognized. Learners must be ready to learn, or this method results in failure for many. When all learners are ready, the direct method may be employed with an entire class simultaneously and successfully. Under other circumstances, a part of the class or just a single individual may be involved in directed instructional situations.

Guided discovery, Problem Solving, Exploration and Task Method are the methods employed extensively, in Movement Education, apart from traditional methods of Physical Education.

Guided Discovery Method

In the guided discovery approach teacher-designed movement tasks are utilized but in a manner in which the children are able to make individual decisions about how to move. However, their attention is focused toward a specific movement response, so that the nature of the responses produces similar movements from the entire class. This approach is used effectively in situations in which the teacher is interested in children discovering the most suitable movement response for a given task or in the

development of a new skill. In this way children are able to experiment with the use of the body in achieving the objective and developing greater understanding about why particular movements are more efficient and effective.

In this method teacher determines the terminal goal. Students decide movement solution towards the goal. This involves thinking and develops understanding of efficient movement. But takes times, requires careful planning and is difficult with groups in which there is great variability in skills.

Problem Solving Method

Problem solving is an important approach to the attainment of certain objectives of Movement Education. If the child understands the objective and has the necessary understandings and sub skills, he is in a good position to apply them intelligently to the given task. Problem solving plays an important role after the directed experience has established the basic pattern of the new skill, and the efficiency, accuracy, and speed of the skill must be improved. Now the observational powers acquired through a proper basic movement program are applied to the analysis of a specific movement pattern.

In this method teacher sets parameters of movement challenges and safety, raises questions to stimulate a multitude of responses. Students decide how to move within parameter of movement challenge. This method helps for conceptual development and enhances cognitive development and creativity. But is inappropriate if specific out comes are desired.

Exploration Method

Exploration, and the subsequent *discovery* of facts, principles, relationships, and qualities, is a method used by movement educators in creative learning situations. This method is the basic means for involving young children in a variety of movement activities. It is a method that can also be used with older learners in the creation of offensive plays, dances, or gymnastic patterns and sequences, and in the diversification of a specific motor skill. In movements that must be executed in technically correct ways, such as in gymnastic and ballet skills, the direction or combination and sometimes the speed are the variables. Starting and ending positions are often good possibilities for exploration.

In this method teacher sets parameters of movement challenges and safety. The student is free to decide any movement response. This allows children to have more freedom in moving and enhances creativity in movements. But is inappropriate in specific outcomes are desired.

Task Method

In this method achievable goals and Targets are set for a movement task. Children learn to perform correct Movements, by working to achieve the set targets.

Movement education refers to (1) learning about the motion factors that influence movement and what the individual can do to increase movement capabilities and abilities to analyze, to construct, and to assess movement; and (2) increasing the individual's appreciation of movement as a functional and expressive tool of human beings. Physical Education has

by tradition meant games, sports, and dance. In the early days of physical education, the term applied merely to training; now it often means simply physical recreation. Movement Education on the other hand, is an all-encompassing effort to educate for movement in such diverse activities as work, play, drama and other art forms, and the seriously competitive activity of sports. The core of its knowledge base is found in Basic Movement Education, but it radiates outward and upward to provide a continuing rationale and support for increasingly complex human activity in increasingly complex social and physical environments. Physical Educators should be versatile and flexible in their methods of teaching.

Indirect methods as guided discovery, problem solving and exploration, will achieve the objectives better than direct, command-style teaching method. A teacher having good understanding of movement education and basic movements, having learnt to analyze skills and their related activities, will never discard indirect methods in teaching.

Conclusion

The dual-track (Basic and developmental) Physical Education program can be prescribed for primary school children. The dual-track curriculum must assure the appropriate emphasis upon each of the two main thrusts in movement oriented Physical Education program-**movement awareness and movement skills**. To under estimate either one is to risk the reduction in the potential of physical education as a vital influence on the lives of boys and girls.

Basic movements are a distinct experience apart from Developmental Movements, which are also distinct experiences apart from the activity of skills learning considered under Expressive

Movements. If utilized properly, with the welfare of the child foremost, physical education offers every child opportunities to become a more fully functioning individual.

4.3.2 Curriculum of Movement Education - Workshop II

A Curriculum of Movement Education was prepared in three stages of activity involving the workshop - II.

(a) First Stage: Pre Workshop Activity

A working paper for the workshop-II was prepared by the Investigators (Annexure - 5) this working paper was circulated to twenty selected members, who also participated in Workshop - I.

(b) Second Stage: Workshop - II

A Workshop-II was conducted on 5th and 6th of July 2003. The objective of the Workshop-II to draft list of activities and evaluation procedures for classes I to V based on principles of Movement Education. On the Guidelines of the working paper, list of activities were finalized in the two-day Workshop.

Dr. Ravindra, Principal, RIE addressed the workshop, on 6th July 2003 and the closing session was presided by Dr. Doresamy, Head, Dept. of Education, RIE.

(c) *Third Stage: Post Workshop Activity*

The list of activities finalized in the Workshop-II were processed by the Investigators, in the background of "A document on Different facets of Movement Education" prepared in Workshop - I and "National Curriculum Framework for School Education" issued by N.C.E.R.T.

By a process of descriptive analysis based on "Background of the present project" and also "review of related literature", a curriculum of Movement Education for Lower Primary Stage was prepared by the Investigators.

The curriculum thus prepared is given in the following pages.

**Physical Education curriculum
at Lower Primary Stage - An Evaluation**
(ERIC - Project: NCERT, New Delhi)

MOVEMENT EDUCATION CURRICULUM FOR LOWER PRIMARY CLASSES

	Content	
Chapter-1	CONTEXT AND CONCERN	
	I. The Context	
	(i) Present Scenario	
	(ii) The Movement Education	
	II. The concern	
	(i) Equal Opportunity	
	(ii) Towards Quality	
	(iii) A Comparison of Physical Education and Movement Education	
Chapter-2	SCHEME OF STUDY	
	I. Aims and objectives of Movement Education	
	II. (A) List of Core Elements	
	(B) Characteristics and Scope of Core Elements	
	(C) Distribution of Core Elements and Allocation of Periods	
	III. Table of Minimum Level of Learning	
	IV. Syllabus for classes I to V	
	V. Facilities: Ground and Equipments	
Chapter-3	EVALUATION	
	I. Examination and Evaluation	
	II. Achievement Reports	
Chapter-4	STRATEGIES OF IMPLEMENTATION	
	I. Instructional Materials	
	II. Orientation to Teachers	
	III. Inclusion in Teacher Training Course	

Chapter-1 CONTEXT AND CONCERN

I. The Context

(i) Present Scenario

Physical Education in the secondary and primary schools of Karnataka has not identified it self with the changing trends in our education system. It is remaining stuck to the trend of "training few children for competition" that existed at last decades of 20th century.

The following aspects of the curriculum and methods of Physical Education for lower primary grade children existing at present are noteworthy,

1. Physical Education is not grouped with language, Arithmetic and Environmental Science, but is grouped with areas as music, arts, crafts and S.U.P.W.
2. MLL are not prescribed in Physical Education, it is done so in languages, Arithmetic and Environmental studies.
3. The present programs of Physical education activities aim at developing many skills by making children play a few competitive games without focusing on developing the basic movement abilities in lower primary school children.
4. Evaluation procedures prescribed for physical education are subjective to a large extent.
5. Men and material infrastructure for Physical Education activities are insufficient in primary schools.

(ii) The Movement Education

Movement Education provides a new direction in planning the curriculum for primary education at lower and higher primary stages. The type of Physical Education existing in Lower Primary stage of our education system is supervised play and also conventional games and exercises. These are mainly activity-centered programs. The rigidity of traditional free play and conventional games needs to be flexed by shifting the emphasis from activity to child. A child-centered programme is more than individualized program. Movement Education is a child-centered program. Movement Education and Physical Education has a difference with respect to the approach in the selection and methods in executing the "activities". The shift of emphasis is from the traditional methods as free-play and direct teaching which involves less of intellectual faculties and more of physical capabilities, to the guided play and implement teaching which involves more intellectual faculties and less of physical capabilities. The approach and the methods employed in Movement Education brings out the desired verbalizing, cognitive, affective and psychomotor objectives. The content in Movement Education is almost the same as that of Physical Education. Much of the content of Physical Education are re-grouped and defined using certain terminologies focusing on different aspects of movement.

Movement Education has three interlocked areas of content. The first one is Basic Movement Education, the second is Developmental Movement Education and the third is Expressive Movement Education. Activities designed in these three areas of content will provide the required material for restructuring the curriculum of Physical Education for Primary School children.

The concern

(i) Equal Opportunity

Going through all changing patterns, Physical Education in schools today has reached a pattern rooted in "Competition based sports and games", catering only to a "very few talented" in every school. It is reported by many, that only "competition centered activities are made available for selected few children" in majority of schools. This is creating a value crisis among children and parents with regard to the Physical Education curriculum.

A shift away from the competition-centered physical Education can help in overcoming this crisis and provide equal opportunity for all children.

(ii) Towards Quality

In any educational endeavor quantitative development has an end but qualitative development is a never-ending process. Keeping in view the quality of education we find a series of curriculum restructuring with varied visions during the past fifty years, along with suggestions for infrastructure developments. The role of Physical Education in the general education of the child also underwent a series of changes in line with restructuring of curriculum. Every time the curriculum of primary education was restructured, the task before Physical Educationists was "how best Physical Education can be effectively integrated into the pattern of our education system".

During pre-independence period physical education in Primary Schools was limited to teaching certain minor games, mass drill and march past practices. It was thought of as training in discipline and a means of relaxation from the tension built in classroom setting. Since the independence of the country, various committees and commissions on education in general, and

physical education in particular, have recommended that physical education should be a compulsory subject for all students at all stages of the school and proper evaluation techniques shall be employed to grade the students.

In National Policy on Education (1986, 1995), two very important suggestions connected with Physical Education were made they are,

1. Integration of Physical Education and sports in learning process.
2. Evaluation of performances.

These two areas of Physical Education need immediate and very serious attention from all those concerned with primary education in our country.

Government of India has accepted in principle the importance of Physical Education at elementary level, in promulgation of sports policy in NPE 1986 and 1995 that, "Sports and Physical Education should be an integral part of the curriculum as a regular subject in schools and other similar educational Institutions. It shall be the responsibility of both the Central and State Governments to explore all avenues to reach the goal. As such hence forth special importance should be attached to Physical Education and sports at the elementary level". To achieve quality in Physical Education, the avenues to make Physical Education as a regular subject have to be explored.

Talent search (quality in performance) is made among children of 12yrs (7th and 8th Std) age. Up to the age of 12 years a clear majority of children are not exposed to guided Movement development activities. Without training children at grass root level, searching for talent will not bear good fruits. Hence a suitable change in the approach of the design of the Physical Education curriculum provide for good training at grass root level, will effect a shift towards quality.

(iii) **Physical Education and Movement Education at Lower Primary Stage**

The Existing Physical Education Curriculum	The Movement Education Curriculum
1) A product oriented approach Based on principles of performance Analysis (theories of Kinesiology)	1) A process oriented approach Based on principles of Movement analysis (theories of Information Processing)
2) Activities are classified into different groups on the basis of performance analysis.	2) Activities are classified in the different groups on the basis of movement analysis
3) Is considered as an area, other than cognitive area of learning in National Educational Policy-1986 (R.1994)	3) It is proposed to be considered under the areas of cognitive learning in Lower Primary School Level Education
4) Is considered along with Music Arts, and Crafts. MLL are not prescribed in the curriculum.	4) MLL are defined, Examination and Evaluation procedures are prescribed, and hence it is proposed to be considered as one of the core subjects along with Languages, Arithmetic and Environmental studies
5) Many of the specific learning outcomes of core subjects are not specifically achieved through the "Methods" adopted in Physical Education activities	5) Many of the specific learning outcomes of core subjects are achieved through the "Methods" adopted in Movement Education activities
6) Trained Physical Education Teachers teach the activities	6) Regular classroom Teachers can teach the activities

I. Aim and Objectives and Definitions of Movement Education

The terminology adopted, reflects the focus and the core of competency in children.

(i) Aim of Movement Education:

The aim of Movement Education is to provide for mental, social and physical development in children of primary school stage, through Learning of Movement Elements, Movement patterns and Movement skills.

(ii) General objectives of Movement Education

1) Development of Intellectual Skills

Movement Education helps children to grow intellectually through verbalizing problem solving and creative thinking behaviours through participating in different activities.

2) Development of Physical and Mental Health

Movement Education helps children to learn physical skills and concepts that are basic to the sound health of body and mind.

3) Development of Recreational Skills

Movement Education helps children to acquire recreational skills that an individual can command, for a lifetime participation in sports and games.

4) Development of Citizenship

Movement Education contributes to the child's understanding of how a democratic society works, through participation and sharing of responsibilities in activities.

5) Development of Life Skills

Movement Education provides opportunities for children to develop positive self-concept paving way for acquisition of life skills as critical thinking, decision-making, problem solving, communication, self-awareness and coping with stress.

6) Development of Values

Movement Education provides meaningful experiences that help children to think about and develop values as truth, righteous conduct love, peace and non-violence.

(iii) The following are specific behavioral objectives of Movement Education,

(1) Verbalizing objective

Children learn to verbalize Movements.

(2) Cognitive objective

Children develop memory, understanding and a variety of thinking behaviors connected with movements.

(3) Affective objective

Children develop attention, co-operation, tolerance, sharing, self-discipline, obedience, courage.

(4) Psycho - Motor objective

Children develop ability to apply the cognitive skills in performing variety of movements.

(iv) *The following are the basic definitions involved in Movement Education*

Movement Education

"Movement Education is a part of the total education programme for children, that contributes for the development of efficient movement responses, with an awareness of the capabilities of the body in relation to the components of the movements, contributing to the acquisition of knowledge, understandings and application of variety of movements" "The Movement Education comprises of **three interrelated phases** as "The Basic Movement Education", "The Developmental Movement Education" and "The Expressive Movement Education"

The above three phases of Movement Education are defined as follows,

(i) *Basic Movement Education is defined as,*

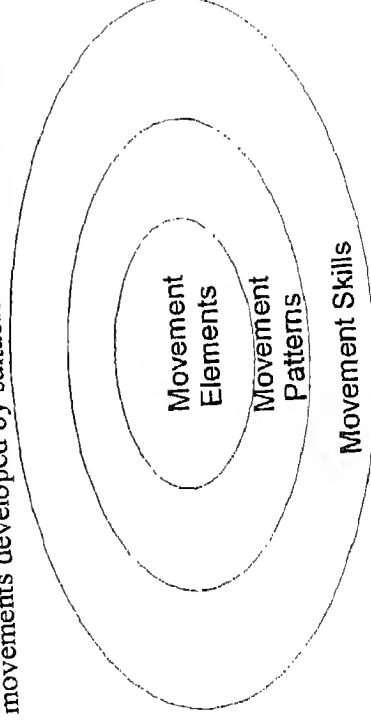
"All experiences that contribute for the learning of *Movement Elements* along with awareness of body, space, time, force and flow". Basic movements are the movement activities fundamental to all movements.

(ii) *Developmental of Movement Education is defined as,*

"All experiences that contribute for the learning of *Movement Patterns* along with awareness of body, space, time, force and flow". Movement patterns are the movements developed by different combination of movement elements.

(iii) *Expressive Movement Education is defined as,*

"All experiences that contribute for the learning of *Movement Skills* of sports and games that leads to specific motor abilities. Movement skills are the movements developed by suitable combination of different movement patterns.



Representation of the concentric Domains of Movements: The Movement Elements, The Movement Pattern and the Movement Skills

II. (A) List of Core Elements

The terminology adopted, reflects the focus and the core of competency in children.

The Domains

- I. Movement Elements
- II. Movement Patterns
- III. Movement Skills

I. Core elements in Domains of Movement Elements

- 1) Locomotor Movements
- 2) Non - Locomotor Movements
- 3) Manipulative Movements

II. Core elements in Domains of Movement Patterns

- 1) Educational Games
- 2) Combative
- 3) Aerobics
- 4) Gymnastics
- 5) Community singings with movements

III. Core elements in Domains of Movement Skills

- 1) Athletics
- 2) Games
- 3) Yogic Exercises

III. Special Activities

- 1) Swimming
- 2) Drill and Marching
- 3) Indigenous Activities
- 4) Observance days of National Importance and Play days
- 5) Hike

The activities considered are interrelated, with respect to their domains

II. (B) Characteristics and Scope of Core Elements

The terminology adopted, reflects the focus and the core of competency in children.

I. Core Elements in Domain of Movement Elements (Basic Movement Education)

1) Locomotor Movements

Characteristics: The distinguishing characteristic of Locomotor actions is a change in place is involved. All Locomotor patterns move the entire body from one place to another place. The distance is unimportant.

Scope: Locomotor movements comprise the movements like walking, running, jogging, jumping, hopping, crawling, climbing, gallop etc.

2) Non-Locomotor Movements

Characteristics: The distinguishing characteristic of Non-Locomotor actions is that absolutely no change in place is involved, although the body may be very active. As long as the weight of the body remains over its base, feet, hands and feet, or other body parts and that base does not move, there is Non-Locomotion taking place. The activities are best characterized as efforts to balance, to move various parts of the body or of suspension.

Scope: Non Locomotor Movements comprise the movements like, sitting, standing, stretching, twisting, rotating, bending etc. which are basically connected with postures.

3) Manipulative Movements

Characteristics: When objects are handled, they are manipulated. They may be held, propelled or caught in some fashion. The distinguishing characteristics of manipulative actions is the focus on the management of some kind of an object, be it a ball, rope, hoop, or something else.

Scope: Manipulative movements comprise the movements like ball catching, throwing, kicking, striking, hitting, etc.

II.

Core Elements in Domain of Movement Patterns (Developmental Movement Education)

1) Educational Games

Characteristics: The educational games program relates all game activities to the principles of motion common to all movement. Instead of having a fragmented program of activities that have little purpose other than keeping children busily active, the games program continues the effort to relate movement to thinking by using the Basic Movement vocabulary to communicate problems, solutions, and understandings to everyone involved. Games are a natural outgrowth of Basic Movement activities that focus especially on space, manipulation, and relationship.

Scope: Games are grouped in various ways. A simplified grouping is provided here.

1. Tag Games: Games in which one or more players under specified conditions have been chased. This involves basic skills such as running, dodging, chasing, and tagging.
2. Relay Games: Relay games are activities in which more than two teams of players, take turns in performing a certain task. Specific role of relay games makes children learn democratic principles such as fair play, living together etc.
3. Small area games: Played between two groups under specified area and specific rules. The rules of the game are strictly addled by all teams.
4. Free Movements, Mimes, Imitations and Action songs: These gives scope for developing memory and adaptations and creative movements.

Each of the above division can be divided further according to the type of activity. The basis of such subdivision may be similarity of skills, objectives, equipment used, or formations. Each subdivision becomes a file of activities. Sometimes the activities in the file are arranged according to difficulty, which makes it easy to find games to stimulate a desired progression. Children like to use their skills in situations that are appropriately challenging. A game file can help the teacher plan interesting lessons.

2) Combatives

Characteristics: These activities are self-testing activities, which makes children develop reflexes and quick decision making skills and also test their strength and endurance with their own friends. These activities will show "The Placement" of an individual child in the group with respect to the objectives of the movement pattern involved in the activity.

Scope: Combatives like hand push, hand pull, back to back push, duck fight, cock fight, dog and the bone etc.

- 3) **Aerobics**

Characteristics: Aerobics are continuous free arm movements repeated at fast regular intervals forming a continuous pattern with or without an object.

Scope: Activities like Step dance, Skipping, Agility exercises etc,

- 4) **Gymnastics**

Characteristics: Any skill in gymnastics can serve as a self-testing activity for the student to monitor his or her ability and progress. The sport also allows for a great deal of creativeness, small and large group interaction and challenge to students at all levels.

Scope: Apparatus activities and non-apparatus activities, floor exercises and stunts.

- 5) **Dances with Community Songs**

Characteristics: Dance is a creative learning experience characterized by sequential flow of movement patterns accompanied with music and singing. Children create dances with their bodies with or without musical or other accompaniment. At first, these dances are very short, only a phrase or so in length.

Scope: Most of the Dances have a set of directions for performing the dances along with singing. Sometimes these directions come from a book or record; other times they come from the teacher. There is a third possibility, which combines the creative aspect of dance with the structure of folk forms. There is a dire need for physical educators to take up the challenge and include singing and dance as sequentially planned movement learning experiences in physical education from the earliest age on.

Core Elements in Domain of Movement Skills (Expressive Movement Education)

III.

- 1) **Athletics**

Characteristics: These activities comprises running, jumping and throwing sequences. These are the very root of organic development for those who prepared for. This should be perused by all children, since it creates immense urge to give best of an individual.

Scope: This comprises of sprints, middle and long distance run, throwing a ball for an object and jumping for height, distance.

2) Games

Characteristics: Games involves rigorous big muscle activity and develops team spirit and makes children to recognize and respect the ability of others and to work with them in a co-operative effect for the good of the team.

Scope: Games are such as football, kabaddi, kho-kho, volleyball, tennis, table tennis, shuttle badminton etc

3) Yogic Exercises:

Characteristics: All exercises or movements, which doesn't give pain and create awkwardness to the systems, designed and defined as "Yoga Asana". These are the exercises involving defined poses combined with suitable breathing. Teachers should experiment this slowly and steadily with supervision. Teachers should teach Yoga movements which are congenial for the children. Children should not be forced to do the particular asana.

Scope: Simple asanas like padmasana, shalabhasana, bhujangasana, suryanamaskar etc. with proper breathing exercise.

IV. Special Activities

1) Swimming

2) Drill and Marching

3) Indigenous Activities: exercises with wands, hoops, flags, dumbbells and lezium exercises, which can be a mass display

4) Observance of Days of National Importance and Play days

5) Hikes

II. (C) Distribution of Core Elements and Allocation of Periods

UNITS					TEACHING PERIODS
I Std.	II Std.	III Std.	IV Std.	V Std.	120
<i>Movement Elements</i>	<i>Movement Elements</i>	<i>Movement Patterns</i>	<i>Movement Patterns</i>	<i>Movement Patterns</i>	
1) Locomotor Movements	1) Locomotor Movements	1) Educational Games	1) Educational Games	1) Educational Games	20
2) Non Locomotor Movements	2) Non Locomotor Movements	2) Combatives	2) Combatives	2) Combatives	15
3) Manipulative Movements	3) Manipulative Movements	3) Aerobics	3) Aerobics	3) Aerobics	10
		4) Gymnastics	4) Gymnastics	4) Gymnastics	
		5) Community Singing with Movements	5) Community Singing with Movements	5) Community Singing with Movements	
<i>Movement Patterns</i>	<i>Movement Patterns</i>	<i>Movement Skills</i>	<i>Movement Skills</i>	<i>Movement Skills</i>	
1) Educational games	1) Educational games	1) Athletics	1) Athletics	1) Athletics	
2) Combatives	2) Combatives	2) Games	2) Games	2) Games	20
3) Aerobics	3) Aerobics	3) Yogic Exercises	3) Yogic Exercises	3) Yogic Exercises	20

Special Activities

- 1) Swimming
- 2) Drill and Marching
- 3) Indigenous Activities
- 4) Observance days of National Importance and Play days
- 5) Hike

DISTRIBUTION OF PERIODS			
Teaching	Achievement Recording (4 Nos)	Half Yearly Examination	Remedial Teaching
120	8	2	25
			Total
			155

III. Table of Minimum Level of Learning For Classes I to V

Core Element	Class - 1	Class - 2	Class - 3	Class - 4	Class - 5
Locomotor	Walking in a line, Running in a line Forward roll, Rabbit Hopping, Leaping, Jumping, Skipping forward and Beam Walk	Continuous forward Roll, Backward shoulder Roll, Cart Wheel, Climbing, Jumping from height, Jumping for distance, Gallop, Beam Walk, Balancing and walking with an object, single leg hopping.			
Non- Locomotor	Sitting, Standing, Stretching, Twisting, Rotating and such other movements which are basic to good posture	Single leg balance, Balancing with an object, Single leg hopping on the spot. Hand grip suspension. and Knee grip suspension.			
Manipulative Movements	Ball Kicking, Bating, Stopping a ball by leg and hand	Kicking, Bating, Throwing Trapping, Catching, Skipping			

Educational Games	Mimes, Imitations:- Actions connected with stories like Fox and Grapes, The thirsty crow, Monkey and the cap seller, A visit to circus, Small area games:- In the pond on the bank, Salute and Hand Shake	Small area games:- Cat and Rat, plucking the tail, Been bag toss, King of the circle, What is the time Mr. Wolf, Fire on the mountain Relay Games:- Collecting the stones, Running for a short distance	Small area games:- Simon says, Find out the leader, identify the changes, Poison ball Relay games:- Tunnel ball relay,	Small area Games:- Dodge ball, hopping touch Tag Games:- Chain tag, snake tag Relay games:- Potato relay	Small area games:- Lion and the cage, Jumping over the stick Relay games:- Potato race, Overhead passing ball relay
	Combatives	Hand push, Hand pull, Stepping on toes	Dog and the bone, cock fight	Stick pull, push out side the circle	Cock fight, stepping on the leg
	Aerobics	Hands up-feet apart, Hands down-feet together, Hands sideways-feet apart, Hands down-feet together	Right hand up-left knee lift, left hand up-right knee lift, Rope skipping	Suitable agility exercises, Rope skipping	Suitable agility exercises, Rope skipping
	Gymnastics		Simple tumbling exercises	Exercises and stunts without Apparatus	Exercises and stunts with Apparatus

Community Singing with movements			Dances with folk songs, Flag dance, sari dance, snake dance	Papalara pillalara, Cheluvina muddina makkale, Vande Mataram, Sare jhahanse accha, Odi vilaiyadu papa	National Integration dances: Janma karini bharatham, Honge kamiyab, Elegalu nooranu, Vishwa vinoothana, Aatha utavu sare raan (Marathi)
Athletics			Basic skills of 50/75mts running, long jump high jump, cricket ball throw	Basic skills of Athletics: 50/75mts running, long jump high jump, cricket ball throw	Basic skills of Athletics: 50/75mts running, long jump high jump, cricket ball throw
Games			Basic skills of football, Kho-kho, Kabbadi, Basket ball, volley ball, throw ball, tennikoit (any three)	Basic skills of football, Kho-kho, Kabbadi, Basket ball, volley ball, throw ball, tennikoit (any three)	Basic skills of football, Kho-kho, Kabbadi, Basket ball, volley ball, throw ball, tennikoit (any three)
Yogic Exercises			Veerasana, Padmasana, Thrikonasana, Padahasthasana	Bhujangasana, Shalabasana,	Shavasana, Sarvangasana, Suryanamaskar,

IV. Syllabus in Movement Education

I - Standard

Unit	Sub - Unit	Activity	* Expected Learning Competencies
1. Movement Elements	1.1 Locomotor Movements	Walking in a line, Running in a line Forward roll, Rabbit Hopping, Leaping, Jumping, Skipping forward Beam Walk, Backward between walk	Children verbalize the parts of the body involved in eight movement elements and also perform the movement elements
	1.2 Non-Locomotor Movements	Sitting, Standing, Stretching, Twisting, Rotating and such other movements that are basic to good postures	Children develop sense of correct posture and balance by verbalizing and performing the five movement elements
	1.3 Manipulative Movements	Ball Kicking, Bating, Stopping a ball by leg and hand	Children develop eye hand and eye leg co-ordination by verbalizing and performing four movement elements
2. Movement Patterns	2.1 Educational Games	Mimes, Imitations:- Actions connected with stories like Fox and Grapes, The thirsty crow, Monkey and the cap seller, A visit to circus, Small area games:- In the pond on the bank, Salute and Hand Shake	Children understand the rules of the game and identify the movement elements involved by verbalizing and performing the movement elements
	2.2 Combatives	Hand push, Hand pull, Stepping on toes	Children verbalize the movement elements and also understand the limit of their strength and endurance
	2.3 Aerobics	Hands up-feet apart, Hands down-feet together, Hands sideways-feet apart, Hands down-feet together	Children develop a sense or rhythm and hand arm co-ordination along with continuous and fast performance of movements

* The listed competencies shall be achieved by adopting suitable methods in implementing the activity, keeping in view the objectives of the Movement Education.

II - Standard

Unit	Sub - Unit	** Activity	* Expected Learning Competencies
1. Movement Elements	1.1 Locomotor Movements	Continuous forward Roll, Backward shoulder Roll, Cart Wheel, Climbing, Jumping from height, Jumping for distance, Gallop, Beam Walk, Balancing and walking with an object, single leg hopping.	Children verbalize the parts of the body involved in eight movement elements and also perform the movement elements
	1.2 Non-Locomotor Movements	Single leg balance, Balancing with an object, Single leg hopping on the spot. Hand grip suspension and Knee grip suspension.	Children develop sense of correct posture and balance by verbalizing and performing the five movement elements
	1.3 Manipulative Movements	Kicking, Batting, Throwing Trapping, Catching, Skipping	Children develop eye hand and eye leg co-ordination by verbalizing and performing four movement elements
2. Movement Patterns	2.1 Educational Games	Small area games:- Cat and Rat, plucking the tail, Been bag toss, King of the circle, What is the time Mr. Wolf, Fire on the mountain Relay Games:- Collecting the stones, Running for a short distance	Children understand the rules of the game and identify the movement elements involved by verbalizing and performing the movement elements
	2.2 Combatives	Line pull, Back to back push, Lane duck fight	Children verbalize the movement elements and also understand the limit of their strength and endurance
	2.3 Aerobics	Right hand up-left knee lift, left hand up-right knee lift, Rope skipping	Children develop a sense or rhythm and hand arm co-ordination along with continuous and fast performance of movements

* The listed competencies shall be achieved by adopting suitable methods in implementing the activity, keeping in view the objectives of the Movement Education.

** Activities of I Std. can be repeated suitably

III - Standard

Unit	Sub - Unit	** Activity	* Expected Learning Competencies
1. Movement Patterns	1.1 Educational Games	Small area games:- Simon says, Find out the leader, identify the changes, Poison ball Relay games:- Tunnel ball relay, Dog and the bone, cock fight	Children understand the rules of the game and identify the movement elements involved by verbalizing and performing the movement elements Children verbalize the movement elements and also understand the limit of their strength and endurance
	1.2 Combatives		
	1.3 Aerobics	Suitable agility exercises, Rope skipping	Children develop a sense of rhythm and hand arm co-ordination along with continuous and fast performance of movements
	1.4 Gymnastics	Simple tumbling Exercises	Children develop self confidence and rhythm and co-ordination
	1.5 Dances with community songs	Dances with folk songs, Flag dance, sari dance, snake dance	Children learn to sing the National Integration songs in chorus and also to perform its relevant dance movements
2. Movement Skills	2.1 Athletics	Basic skills of 50/75mts running, long jump high jump, cricket ball throw	Children learn to verbalize and perform the skills and movement patterns involved in athletic
	2.2 Games	Basic skills of football, Kho-kho, Kabaddi, Basket ball, volley ball, throw ball, temikoit (any three)	Children learn to verbalize and perform the skills and movement patterns involved in games
	2.3 Yogic Exercises	Veerasana, Padmasana, Thrikonasana, Padahasthasana	Children learn to concentrate and also develop a sense of good posture and good breathing

* The listed competencies shall be achieved by adopting suitable methods in implementing the activity, keeping in view the objectives of the Movement Education.

** Activities of I Std. can be repeated suitably

IV - Standard

Unit	Sub - Unit	** Activity	* Expected Learning Competencies
1. Movement Patterns	1.1 Educational Games	Small area Games:- Dodge ball, hopping touch Tag Games:- Chain tag, snake tag Relay games:- Potato relay	Children understand the rules of the game and identify the movement elements involved by verbalizing and performing the movement elements
	1.2 Combatives	Stick pull, push out side the circle	Children develop a sense of cohesiveness and a sense of rhythm
	1.3 Aerobics	Suitable agility exercises, Rope skipping	Children learn the basic commands and actions of foot drill and marching
	1.4 Gymnastics	Exercises and stunts without Apparatus	Children develop self confidence and rhythm and co-ordination
	1.5 Community Singing with Movements	Papalara pillalara, Cheluvina muddina makkale, Vande Mataram, Sare jhahanse accha, Odi vilaiyadu papa	Children learn to sing the National Integration songs in chorus and also to perform its relevant dance movements
2. Movement Skills	2.1 Athletics	Basic skills of Athletics: 50/75mts running, long jump high jump, cricket ball throw	Children learn to verbalize and perform the skills and movement patterns involved in athletic
	2.2 Games	Basic skills of football, Kho-kho, Kabbadi, Basket ball, volley ball, throw ball, tennikoit (any three)	Children learn to verbalize and perform the skills and movement patterns involved in games
	2.3 Yogic Exercise	Bhujangasana, Shalabasana,	Children learn to concentrate and also develop a sense of good posture and good breathing

* The listed competencies shall be achieved by adopting suitable methods in implementing the activity, keeping in view the objectives of the Movement Education.

** Activities of I Std. can be repeated suitably

V - Standard

Unit	Sub - Unit	** Activity	* Expected Learning Competencies
1. Movement Patterns	1.1 Educational Games	Small area games:- Lion and the cage, Jumping over the stick Relay games:- Potato race, Overhead passing ball relay	Children understand the rules of the game and identify the movement elements involved by verbalizing and performing the movement elements
	1.2 Combatives	Cock fight, stepping on the leg	Children develop a sense of cohesiveness and a sense of rhythm
	1.3 Aerobics	Suitable agility exercises, Rope skipping	Children learn the basic commands and actions of foot drill and marching
	1.4 Gymnastics	Exercises and stunts with Apparatus	Children develop self confidence and rhythm and co-ordination
	1.5 Dances with Community songs	National Integration dances: Janma karini bharatham, Honge kamiyaab, Elegalu nooraru, Vishwa vinoothana, Aatha utavu sare raan (Marathi)	Children learn to sing the National Integration songs in chorus and also to perform its relevant dance movements
2. Movement Skills	2.1 Athletics	Basic skills of Athletics: 50/75mts running, long jump high jump, cricket ball throw	Children learn to verbalize and perform the skills and movement patterns involved in athletic
	2.2 Games	Basic skills of football, Kho-kho, Kabbadi, Basket ball, volley ball, throw ball, tennis (any three)	Children learn to verbalize and perform the skills and movement patterns involved in games
	2.3 Yogic Exercise	Shavasana, Sarvangasana Suryanamaskar,	Children learn to concentrate and also develop a sense of good posture and good breathing

* The listed competencies shall be achieved by adopting suitable methods in implementing the activity, keeping in view the objectives of the Movement Education.

** Activities of I Std. can be repeated suitably

V. Facilities: Ground and Equipments

Ground: Minimum of 50X50 play ground

Equipments: Equipments like Mattress, Ladder, Balance beam, Skipping ropes, Sea-saw, Wands, Hoops, flags

Chapter -3 EVALUATION

II. Tests and Examination

Evaluation is an integral part of teaching process at the Lower Primary Stage. Hence continuous and comprehensive evaluation of learnings of children should be done. As an outcome of continuous evaluation, Re-teachings and Remedial teachings shall become a part of teaching process.

The expected Movement Competencies are stated for classes I to V. Verbalizing objectives and Motor objectives, (performance), are listed for each competency. Oral and performance test shall be done after teaching each unit and the progress of children shall be evaluated continuously. Each competency shall be scored on two point scale as "Learnt / Not Learnt" against the verbalizing objective and Motor objective. Evaluation can be recorded in the format as appended here with for classes I to IV.

Four tests, Mid-term and Annual Examination may be conducted for Class V. A written or oral examination for 30 marks on verbalizing and cognitive competencies can be conducted. Motor competencies can be evaluated on 5-point scale and converted to 70 marks. Total marks can be concerted to grades as 86-100 - "A", 70-85 - "B", 50-69 - "C", 30-49 - "D", 0-30 - "E". Students scoring "A, B, C, D, E" grades shall be declared to be promoted to higher class.

II. Achievement Reports

Note:

1. The learning competencies of movement learning shall be distributed in the achievement reports of different classes, in quarterly teaching blocks as June/July-August-September/October-November/ January-February. The distribution shall be in accordance with the guidelines issued by the N.C.E.R.T. for Languages, Arithmetic and Environment Studies.
2. ✓ be marked against the competencies that are learnt by the child. If the competency is not learnt X shall be marked
3. A Summative evaluation shall be recorded in every quarterly period.

Sample of Achievement Card

Name of the Student								
Month	Subject	Learning Competencies	June/ July	Aug/ Sept/ Oct	Nov/ Dec	Jan/ Feb	Mar	
June/July	Languages							
	Maths							
	Environment Studies							
	Movement Learning							
Aug/ Sept/Oct	Languages							
	Maths							
	Environment Studies							
	Movement Learning							

Contd. to next page

Nov/ Dec	Languages				
	Maths				
	Environment Studies				
	Movement Learning				
Jan/ Feb	Languages				
	Maths				
	Environment Studies				
	Movement Learning				
March	Languages				
	Maths				
	Environment Studies				
	Movement Learning				

Chapter 5 - STRATEGIES OF IMPLEMENTATION

I. Instructional Materials

The following three important suggestions made in connection with the implementation of the present curriculum of Movement Education.

A) Teachers Handbook

A teachers Handbook - "*Movement Education for Lower Primary Classes*", based on the Table of Minimum Level of Learning proposed in Chapter-2 (IV) of this curriculum spelling out the details of the activities with a due emphasis on the method to be followed for achieving desired objectives, is required to develop as a logical extension of the "Movement Education for Lower Primary Classes". The handbook should address the primary school teachers who have no specialized training in Physical Education. Each step of the activity should be explained to enable the general teachers to impart instructions in Movement Education.

B) Students Textbook

Students textbooks "*A Textbook of Movement Learning*" in five volumes as I Std, II Std, III Std., IV Std., and V Std., based on the syllabus proposed for classes I to V in chapter-2 (V) of the "Movement Education for Lower Primary Classes" should be developed and made available to all children.

II. Orientation to Teachers

Physical Education officers of different rank working in the department of public instruction and block level and cluster level education co-ordinators should be given orientation course on Movement Education Curriculum for Lower Primary Classes.

A suitable in-service orientation course should be designed for the Lower Primary School teachers and implemented in stages to cover the entire teachers community in a region under consideration.

In-service teachers should be given the necessary guidance in implementing the syllabus in the prescribed period in the time table through the cluster resource co-ordinators and block resource co-ordinators guided by the Physical Education officer in different educational blocks.

III. Inclusion in Teacher Training Course

A course of study of Movement Education should be developed and included in the two-year teacher training courses leading to D.Ed. (Diploma in Education).

4.3.3 Discussion of Results

- i) The document produced in 4.3.1 provides a new line of thinking that may open new visions.
- ii) The curriculum produced in 4.3.2 provides a foundation for physical education at the grass root level.

The discussion presented in 4.3.3 along with the document in 4.3.1 and the curriculum in 4.3.2, highlights the achievement of third objective of the present study.

4.4 Fourth Objective

The fourth objective of the present study is " To study the feasibility of a Physical Education curriculum prepared on the basis of the concepts of Movement Education, for Lower Primary Schools".

Under this objective the following questions are answered

- 1. Is the prepared curriculum feasible for implementation?
- 2. What is the impact of new curriculum on the abilities of children?

4.4.1 Feasibility of the New Curriculum

Feasibility of the new curriculum was assessed from three angles.

- a. To find out the impression of the activities on parents.
- b. To find out whether the chosen activities in the curriculum are relevant to the age group of children.

- c. To find out whether the curriculum can be accommodated in the framework of existing lower primary school system.

(a) *Movement Education Opinionnaire*

To find out the impression of the Movement Education on parents, a Movement Education opinionnaire was administered on 50 parents (Annexure - 6).

The opinionnaire was prepared with the objective of gathering the feelings and belief gained by fifty respondents (parents and other teachers), who were closely observing the programme of Movement Education activities of their children/students.

The opinionnaire consisted of ten statements on which three responses were called from the subjects. The three responses are, "Agree-Undecided-Disagree". The consolidate data by assigning "5-3-1" points respectively for the responses is given in the following table,

Table - 22
The Opinion

Sl. No.	Statements	Percentage of the parents		
		1	2	3
1	Children feel very happy to perform movement activities	250	0	0
2	Children explain to their parents about the activities they perform with excitement and satisfaction.	240	0	2
3	Children get ready for Movement Education classes on their own even without the instruction of teacher.	200	15	5
4	Children discuss and help each other in the Movement Education classes.	150	30	10
5	Inclusion of Movement Education activities gives a new look to the primary school.	225	9	2

6	Movement Education activities will improve learning readiness in children.	125	36	13
7	The Movement Education activities do not improve the classroom learning of children.	150	30	10
8	Some of the Movement activities are found difficult and children may get hurt.	100	60	10
9	Movement Education should be provided in all primary schools.	200	15	5
10	Movement Education classes will improve the concentration and thinking ability of Primary school children.	125	60	5

The above ten opinion statements amount to the following general impression on Movement Education Curriculum. "The Movement Education program conducted in primary school is effective in bringing out wholesome development in children". The average score of the ten opinion statements is given in the following table,

Table - 23

Average Score of the Impressions of Parents

Sl. No.	The Impression on Movement Education Curriculum	Percentage of the parents		
		1	2	3
1	The Movement Education program conducted in primary school is effective in bringing out wholesome development in children	176.5	25.5	62

(b) Feasibility Rating

A two-point rating, as "Yes/No" was prepared on all activities of the new curriculum (Annexure - 7). The rating list was answered by project teachers, co-operating teachers, and Physical education teachers numbering to a total of 150 teachers.

On analysis of the ratings it is found that 98% of the answers are "Yes" on all the activities.

(c) Administrative Feasibility

Administrative feasibility was assessed through a meeting chaired by block education officer, attended by educational officers. The proceeding of the meeting is as follows,

Physical Education curriculum at Lower Primary Stage - An Evaluation
(ERIC - Project: NCERT, New Delhi)

**MOVEMENT EDUCATION CURRICULUM
FOR LOWER PRIMARY CLASSES**

PROCEEDINGS OF THE MEETING

Meeting notice No.F.1-4/DEE/2003-04/RIEM Dated 21st November 2003, issued with the approval of the competent authority.

Proceedings of the meeting held on 24th November 2003 at 11.30am at the office of the Block Educational Officer, Dept. of Public Instruction, Mysore South, Mysore, under the chairmanship of Sri. R. Raghunandan, Block Educational Officer.

Following members attended the meeting

- | | | |
|---|---|---|
| 1) R. Raghunandan
Block Educational Officer
Mysore South
Mysore | 2) Dr. Chandra Kumar
Prof. Of Physical Education
Dept. Studies in Physical
Education and Sport
Sciences University of
Mysore, Mysore | 3) Sri. R. Govindaiah
Educational Co-Ordinat
Mysore South |
| 4) Sri. Ranganath
Physical Education Co-
Ordinator,
Mysore South, Mysore | 5) Sri. Puttaramu
Physical Education Co-
Ordinator,
Mysore North | 6) Sri. Hanumanthe Gowd
Physical Education C
Ordinator
Mysore Taluk |
| 7) Sri. Krishnamurthy
Principal,
Institute of Education D.Ed.
Institute, Mysore | 8) Sri. R. Baburao
Headmaster,
Institute of Education High
School, Mysore | 9) Sri. Mahadevaiah
Lecturer,
Institute of Education
D.Ed. Institute, Mysore |
| 10) Sri. Purushottham
Physical Education Teacher,
Govt. Sharadavilas Higher
Primary School, Kanakagiri | 11) Miss. Sumalatha
Asst. Mistress
Sagar S.G.K. Lower Primary
School, Bandipalya | |

Investigators

- | | | |
|---|--|--|
| 12) Sri. S. Balakrishnaiah
Principal Investigator | 13) Dr. P.V. Sudarshan
Co - Investigator | 14) Dr. V. Venkatachala
Co - Ordinator |
|---|--|--|

1. Dr. Venkatachala, Co-Ordinator of the research project, welcomed the members and spoke about the project and requested Sri. R. Raghunandan, B.E.O., Mysore South, to preside over the meeting.
2. Dr. P.V. Sudarshan, Co-Investigator, explained the different aspects of the document "Movement Education Curriculum for Lower Primary Classes". He reported to the members that feasibility of the activities proposed in the curriculum have been assessed by implementing the curriculum in three Higher Primary Schools during the period August to November-2003. The assessment has

revealed that the activities proposed are suitable to different age groups and also the listed specific objectives are achievable through the proposed activities. Further he placed the following four points for discussion and decision.

- (i) In the existing curriculum of primary education, Physical Education is considered as an area, other than cognitive area of learning.

It is proposed in the present curriculum to consider Movement Education (Physical Education for children of primary school age) under the cognitive areas of learning.

- (ii) In the existing curriculum of primary education, MLL are not prescribed for Physical Education and further Physical education is considered along with Music, Arts, and Crafts.

It is proposed to consider Movement Education as one of the core subjects along with Language, Arithmetic and Environment Studies and the MLL proposed in the curriculum can also be prescribed in the regular syllabus.

- (iii) It is proposed in the present curriculum that the methods adopted for the Movement Education activities should be suitably designed to achieve the specific learning outcome of core subjects also. An integration of specific learning outcomes should be achieved through suitable methods of Movement Education.
- (iv) In the existing primary school curriculum Physical Education activities are being taught by trained Physical Education Teachers.

It is proposed in the Movement Education curriculum that regular classroom teachers can teach the activities.

Placing the above four points for discussion He stated that a decision on the above four points would amount to a resolution about the feasibility of the curriculum from the view point of educational administrators.

3. Sri. R. Raghunandan, Chairman of the meeting called for discussion on the proposed four points.
4. Prof. Chandrakumar, referring to point (i) stated that Movement Education provides a change in the approach of Physical Education activities and hence can be brought under cognitive learning. In the present Physical Education all children are not provided regular activities, only few talented children are trained in few sports and games. A deliberate attempt is required to change this existing situation by providing movement leaning activities as proposed in the document "Movement Education Curriculum".
5. Sri. Puttaramu, Physical Education Co-Ordinator, Mysore North, stated that the syllabus proposed in the curriculum provides for cognitive learnings under verbalizing and affective objectives. Hence can be considered under cognitive learning.
6. Sri. Hanumanthe Gowda, Physical Education Co-Ordinator, Mysore Taluk, stated that a charge in the concept should be done. Present Physical Education syllabus should be changed from "other than cognitive area of learning" to "cognitive are of learning" in the curriculum of primary schools, under the title the Movement Education.

Resolution No.1

Consolidating the views of all members Sri. R. Raghunandan, Chairman, passed the ruling: *"Movement Education can be considered under the areas of cognitive learning in Lower Primary School Level Curriculum"*.

7. Sri. S. Balakrishnaiah, Principal Investigator, initiating discussion on point (ii) informed the members that the MLL proposed in Movement Learning in the present curriculum are tried out in three schools and are found to be achievable.
8. Prof. Chandrakumar proposed that flexibility should be provided in MLL, by permitting teachers to modify the MLL according to local conditions.
9. Sri. Govindaiah, Educational Co-Ordinator, proposed that a teachers hand book regarding MLL in movement learning and MLL based textbook for students are also essential for prescribing Movement Learning as "Core Subject" along with other three existing subjects in the Lower Primary Schools.

Resolution No.2

Consolidating the views of all members Sri. R. Raghunandan, Chairman, passed the ruling: *"Movement Education can be considered as one of the core subjects along with Language, Arithmetic and Environment Studies. Teachers Hand books and MLL based text books can be prepared and made available"*.

10. Sri. R. Raghunandan, BEO and Chairman, suggested that the words "many of the specific learning outcome" stated in chapter 2. I(5) of the document is not appropriate and should be rewarded deleting the usage of word "many". In continuation Prof. Chandrakumar suggested to use specific statements.
11. Dr. P.V. Sudarshan, explained few examples of relay games. He highlighted, how the specific learning objectives of Arithmetic as "counting" and "adding", can be achieved through the relay games. He further stated that many specific learnings of Language, Arithmetic and Environment Studies can be easily achieved through a good program of "Movement Education".
12. Dr. Venkatachala explained the methods adopted in "Movement Education". Citing examples he stated that specific learning objectives under "Verbalizing" and "Cognitive" outcomes of Movement Learning can be very well integrated with the specific learning objectives (MLL's) of the three core subjects. He added that, to achieve this "Integration" *indirect methods of teaching* envisaged in Movement Education should be properly employed.
13. Sri. R. Baburao explained how children of 1st Std. learnt the concepts of geometrical shapes like triangle, square and circle through movement learning activities in his school, and confirmed the explanations stated by the investigators (Point No. 11 and 12).

Resolution No. 3

Consolidating the views of all members Sri. R. Raghunandan, chairman passed the ruling: *Integration of the objectives of "**Movement Learning activities**" with the specific learning objectives (MLL) of*

Language, Arithmetic and Environmental Studies is possible by the methods in Movement Education.

14. Sri. Krishnamurthy, Principal, I.O.E, D.Ed. Institute, informed the members that, in the present. Teachers Training Course (D.Ed.) "Physical Education" is made a compulsory subject and the Teacher trainees are given sufficient practice in conducting Physical Education Classes.
15. Miss Sumalatha, a general teacher (not P.E.T) from Sagar S.G.K. Lower Primary School, stated that she was able to handle movement education classes successfully during the four months period of "feasibility study of the curriculum", in her school.
16. Sri. Purushotham, P.E. Teacher from Govt. Sharada Vilas Higher Primary School, also said that Movement Education classes could be conducted successfully by regular class room teachers also.
17. Sri. R.Baburao, Headmaster, Institute of Education stated that children "enjoyed Movement Education Classes", in his school during the feasibility study-implementation period (Aug-Nov 2003). Further he stated, regular subject teachers conducted Movement Education classes also, and Movement Education was prescribed in the school timetable. Students were found more active and more disciplined as a result of Movement Education.

Resolution No. 4

Consolidating the views of all members Sri. R. Raghunandan, Chairman, passed the ruling: *"Regular classroom teachers can teach the activities of movement learning"*.

18. Prof. Chandrakumar suggested for a pilot study of the curriculum on a larger sample of schools.
19. Sri. R. Raghunandan, Chairman, suggested to the members to find out ways and means of launching a pilot study under S.S.A project or any other such projects and assured full support for a pilot study.
20. Further, summing all the above four resolution Chairman stated that, **the "Movement Education Curriculum for Lower Primary School" is feasible for a pilot study on a large sample of schools, and also, in the light of the results of pilot study, the curriculum can be implemented in all the schools of Karnataka.**

Sri. S. Balakrishnaiah, Principal Investigator, accepting the views and suggestion of all members of the committee stated that the present meeting under the chairmanship of Block Educational Officer has provided an assessment about the feasibility of the curriculum interms of the "Educational Administration", through the four important resolutions. Further he thanked all members for their active participation in the two hour-long deliberations of the meeting.

R. Raghunandan
Chairman

4.4.2 Impact of New Curriculum

The variables chosen for the impact study are as follows,

1. Exteroceptive Ability
2. Proprioceptive Ability
3. Motor Memory Ability

All the above three variables are process oriented abilities. Hence they were preferred as variables for the impact study. The impact study was done in an experimental design. The five groups of children who were selected for feasibility study were considered as controlled groups. These groups of were administered standardized MMF test for the three variables, before the implementation of curriculum (during the month of July) and after the implementation of the curriculum (during the month of December).

An equivalent group was chosen as experimental groups, on the basis of the scores of RPM test, children of the experimental groups were also administered the standardized MMF test for the three variables during the month of the July and during the month of December.

The sample for the impact study are as follows,

- I. Five groups of students selected as controlled group for the impact test.
 1. Group of I Std Children from Institute of Education Higher Primary School, Vidyaranyapuram.
 2. Group of II Std Children from Sagar S.G.K Lower Primary School, Bandipalya.
 3. Group of III Std Children from Sagar S.G.K Lower Primary School, Bandipalya.
 4. Group of IV Std Children from Govt. Sharadavilas Higher Primary School, Kanakagiri.
 5. Group of V Std Children from Govt. Sharadavilas Higher Primary School, Kanakagiri.

II. Five groups of students selected as experimental group for the impact test.

1. Group of I Std Children from Sagar S.G.K Lower Primary School, Bandipalya.
2. Group of II Std Children from Govt. Sharadavilas Higher Primary School, Kanakagiri.
3. Group of III Std Children from Govt. Sharadavilas Higher Primary School, Kanakagiri.
4. Group of IV Std Children from Institute of Education Higher Primary School, Vidyaranyapuram.
5. Group of IV Std Children from Institute of Education Higher Primary School, Vidyaranyapuram.

The pre-test and post-test data obtained from MMF test, on the controlled and experimental groups are given in the following tables

Table - 24
Scores of MMF Test

Class	Controlled Group						Experimental Group					
	Pre - Test			Post - Test			Pre - Test			Post - Test		
	E	P	M	E	P	M	E	P	M	E	P	M
I Std	54	55	58	60	60	61	55	56	55	56	58	56
II Std	56	58	55	60	62	59	55	57	53	56	57	53
III Std	52	53	56	55	56	58	50	52	54	50	54	55
IV Std	55	57	49	58	58	51	50	55	48	51	55	49
V Std	60	58	59	62	60	62	59	54	58	60	55	59

Note: Average scores of the entire group have been considered a representative score for the Exteroceptive, Proprioceptive and Motor-Memory abilities.

The difference in the scores between the pre-test and post-test is given in the following table,

Table - 25
Score differences

Class	Controlled Group			Experimental Group		
	Score Difference			Score Difference		
	E	P	M	E	P	M
I Std	+6	+5	+3	+1	+2	+1
II Std	+4	+4	+4	+1	0	0
III Std	+3	+3	+2	0	+2	+1
IV Std	+3	+1	+3	+1	+1	+1
V Std	+2	+2	+3	+1	+1	+1

4.4.3 Discussion of Results

- (i) Based on the results of Movement Education Opinionnaire, Feasibility rating and meeting of administrators, it can conclude that the "Movement Education Curriculum for Lower Primary Stage" is feasible of implementation.
- (ii) The impact study reveals that the Movement Education activities improve the Exteroceptive, Proprioceptive and Motor Memory ability to the greater extent than the prevailing Physical education activities.

The discussion presented in 4.4.3 highlights the achievement of fourth objective of the present study.

Chapter - 5

Conclusions, Outputs and Recommendations

- 5.1 The Conclusions
- 5.2 The Outputs
- 5.3 Recommendations

5.1 The Conclusions

The following are the conclusions based on the results of the present research project.

1. 80% of Headmasters, 60% of General Teachers and 90% of Physical Education Teachers have positive attitude towards Physical Education in the Lower Primary School of Mysore city.
2. 40% of General Teachers and 20% of Headmasters have negative attitude towards Physical Education in the Lower Primary School of Mysore city.
3. Existing aims and objectives of Physical Education for Lower Primary Schools are not stated in clear terms.
4. The existing syllabus of Physical Education for Lower Primary Schools thus not contain minimum level of learning and also the activities prescribed under yogic exercise and formal activities are not found appropriate hence have to be reviewed.
5. The Physical Education activities conducted in Lower Primary schools of Mysore City are found in accordance with the prescribed syllabus.
6. The Ground, Equipments, Drinking water and Sanitation facilities in the Lower Primary Schools of Mysore City are available as per the requirement.
7. 50% of Lower Primary School of Mysore city does not have Physical Education Teachers.
8. Since Physical Education is not a core subject and no MLL are prescribed, evaluation of Physical Education activities are not carried out in systematic manner in the schools of Mysore city.

9. The document on Different Facets of Movement Education provides a new out look for Physical Education at it grass root level.
10. The Movement Education Curriculum for Lower Primary Stage, prepared in this project is feasible for implementation and also the activities suggested have a good impact on the children interms of developing their Motor Monitoring Abilities (Exteroceptive, Proprioceptive and Motor Memory Ability).

5.2 The Outputs

Two documents are produced in the research project they are,

1. A Document on Different Facets of Movement Education
2. A Movement Education Curriculum for Lower Primary Stage

The first document is prepared by the investigators based on content analysis on Movement Education and the output of Workshop - I.

The second document is prepared by the investigators, keeping in view The National Curriculum Framework for School Education issued by N.C.E.R.T, analysis of the present curriculum followed in Lower Primary Schools in Mysore City, content analysis on Movement Education and the output of Workshop - II.

Recommendations

1. "Physical Education" at Lower Primary Stage can be renamed as "Movement Education.
2. Movement Education can be considered as a core subject for Lower Primary Stage.
3. The Movement Education Curriculum for Lower Primary Stage prepared under this project can be implemented in representative districts of Karnataka as a pilot project, and the feasibility of implementation can be assessed over a larger population.
4. A Teacher's manual based on the Movement Education Curriculum can be prepared.
5. A student's material graded as I Std., II Std., III Std., IV Std., and V Std., can prepare based on the syllabus of Movement Education Curriculum.
6. Seminars and Conferences can be arranged at National and State Levels to mobilize the concept of Movement Education.

BIBLIOGRAPHY

- 1) Movement Studies and Physical Education - J E Kane
- 2) The Principles of Physical Education - Williams
- 3) Experiences in Movement - Physical Education for the Elementary School Child - FAIT
- 4) Movement Education in Physical Education A Guide to teaching and planning - Hayes Kruger, Jane Myers Kruger.
- 5) System Analysis for Effective School Administration by John Mc Manama - 1971 by Parker publishing company. Inc, West Nyack, New York - 10994.
- 6) National Curriculum for School Education - Salient Features and Summary - NCERT
- 7) Quantification of Motor Monitoring Factor in for Lower Primary School Children. An unpublished doctoral thesis submitted to University of Mysore - P.V. Sudarshan, 2001
- 8) Need for Movement Education in Elementary Schools - an article by Tapan Mohan Chakraborty in Vyayam-Vidnyan, vol-22, No.2-3, May-August 1989
- 9) Moving and Learning - The Elementary School Physical Education Experience - Beverly Nichols, Associate Professor, University of Vermont, 1986

Not to be published